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Determining the effects of employee trust on organizational commitment

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Pepperdine University

Graduate School of Education and Psychology

DETERMINING THE EFFECTS OF EMPLOYEE TRUST

ON ORGANIZATIONAL COMMITMENT

A dissertation submitted in partial satisfaction

of the requirements for the degree of

Doctor of Education in Organizational Leadership

by

Ron Freund

May, 2014

Leo Mallette, Ed.D. – Dissertation Chairperson

This dissertation, written by

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under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

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I want to express my deepest appreciation to my parents, Bill and Joy Freund. Their unrelenting love, support, and belief in my abilities have given me the confidence to succeed in education, career, and life.

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VITA

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ABSTRACT

An employee's trust in their leadership is an important antecedent to organizational commitment. It is commonly believed that committed employees will work harder to achieve organizational objectives, so organizations often try to foster commitment in their employees to achieve improved organizational performance. The purpose of this qualitative study was to examine the relationship between trust and organizational commitment. The population consisted of 31 employees from 3 high-technology organizations in the United States. The study consisted of 2 research instruments and 5 demographic questions that were administered to employees of 3 high-technology organizations. The survey instrument used to measure trust was Cummings and Brimley's Organizational Trust Inventory. This instrument separates trust into the 3 dimensions of keeping commitments, negotiating honestly, and not taking advantage. The survey instrument used to measure organizational commitment was Meyer and Allen's Three Component Model. This second instrument separates organizational commitment into the 3 dimensions of affective commitment, normative commitment, and continuance commitment. The study revealed a strong positive correlation ($r = .38$) between an employees' total trust and their total organizational commitment. The study revealed that 12 of the 16 possible correlations between trust and organizational commitment were positively correlated. The study findings indicate that leadership skills are critical to increasing trust levels that enable organizational commitment. By improving the leadership and organizational antecedents that promote a trustworthy environment, employees become more committed and organizational performance improves.

Chapter I: Introduction

Business leaders of the 21st century, competing in a global economy, face many

obstacles. Globalization, downsizing, competition, reengineering, and rapidly changing

technologies are just a few of the factors that are facing the majority of organizations (Friedman,

2006; Lewicki, McAllister, & Bies, 1998; Shockley-Zalabak, Morreale, & Hackman, 2010).

Friedman (2006) coined the phrase *the world is flat* to describe the leveling of the playing field

that globalization has created. In *The Speed of Trust*, Covey and Merrill, (2006) quoted

Friedman stating that "without trust, there can be no flat world, because it is trust that allows us

to take down walls, remove barriers, and eliminate friction at borders. Trust is essential for a flat

world…" (p. 21). Covey and Merrill (2006) go on to claim that in this flattening world,

American's are well suited to compete because

> …if you wanted to summarize the net effect of these institutions, cultural norms, business
>
> practices, and legal systems, it can be reduced to one word: trust. They create and inspire
>
> a high level of trust-and a high level of trust is the most important feature any open
>
> society can possess. Trust, in many ways, is the product of all the ingredients in
>
> America's secret sauce. (p. 334)

To compete and thrive in this global environment, companies need effective leaders who

can motivate followers to achieve organizational goals and objectives. Goldsmith, Greenberg,

Robertson, and Hu-Chan (2003) stated that "the leadership models of the past provide little

guidance for the business context of the future" (p. 1). Leadership roles need to adapt to meet

the demands placed upon them. Leaders are required to have increased communication

expertise, visionary thinking, and analytical skills; however "leaders succeed in producing

outstanding results only when they are trusted by their constituents to make changes during uncertainty and lead for a better future" (Shockley-Zalabak et al., 2010, p. 197).

This dissertation provides an overview of how organizational trust is created, reinforced, and weakened. It explains how the characteristics of the leadership and organizational structure are antecedents required to establish an environment that enables trust. It explains how trust is instrumental in creating a trustworthy state of mind that will inspire a willingness of the employee to provide help and assist others beyond one's work role, and with no direct reward. This extra-role behavior is a result of an employee's organizational commitment. These behaviors result in the organizational performance that is critical for success in today's global environment. The dissertation provides quantitative research data, conducted on a high-technology organization, which show the effects that organizational trust has on the employees' organizational commitment.

Background of the Problem

High-technology organizations have employees who work primarily with information or who develop and use knowledge in the workplace (Drucker, 1957). A high-technology organization is defined by the Congressional Office of Technology Assessment as an organization "engaged in the design, development, and introduction of new products and/or innovative manufacturing processes through the systemic application of scientific and technical knowledge" (Hecker, 2005, p. 57). Typically, these firms use state of the art techniques, devote a high proportion of expenditures to research and development, and employ a high proportion of scientific, technical, and engineering personnel.

High-technology organizations are important because they have an influence on the economy of the world. According to the National Science Board's Science and Engineering

Indicators (NSBSEI), the global research and development expenditures are growing faster than

the United States Gross Domestic Product. The global total expenditures rose from an estimated

$522 billion in 1996 to $1.3 trillion in 2009, with both the US and China investing about $400

billion in 2009. The trend in investments by the United States and other countries of the world in

the development of more Knowledge-and Technology-Intensive Industries (KTI) is of growing

importance (National Science Board, 2012). In a recent National Science Board (2012) report, it

was stated that the global value added by KTI totaled $18.2 trillion in 2010, representing 30

percent of the estimated United States gross domestic product. The US high-technology

manufacturing industries have a larger share of the global output than any other economy.

However, with the United States global share falling from 34% in 1998 to 28% in 2010, and

China's share of the world's high-technology manufacturing rising from 3% in 1995 to 19% in

2010, there is some reason for the US to become concerned (National Science Board, 2012).

To overcome the effects of increased globalization and world competition, high-

technology organizations must be able to adjust to the environmental obstacles in order to

maintain a competitive advantage or remain viable. With many organizations becoming leaner

in an effort to remain competitive, the workers who remain are given increased responsibility,

trained to higher levels, and are therefore more difficult to replace. It is critical for leaders to

nurture an environment that elicits the commitment of their employees. Since the decision to

trust is based on a belief, it has an affective component. Meyer and Allen (1991) defined

affective commitment as individual employees' attachment, identification, and involvement with

their organization. It is the psychological link between individual employees and the

organization. Affective commitment has been shown to correlate positively with trustworthy

behaviors and organizational citizenship behavior (Meyer & Allen, 1997; Organ, 1997; Organ & Ryan, 1995; Podsakoff, Whiting, Podsakoff, & Blume, 2009; Smith, Organ, & Near, 1983).

Lewis and Weigert (1985) postulated that interpersonal trust has both affective and cognitive foundations. They contend that a*ffect-based trust* is an emotionally based component of interpersonal trust that forms from feelings and intuition, and becomes the basis for affective commitment. It is most commonly created when someone demonstrates his care and concern for another's welfare. The other type of trust, *cognitive-based trust* is formed when someone is perceived as responsible, reliable, and competent. By observing these characteristics, we hold the rational belief that the person can be trusted (Lewis & Weigert, 1985).

Organizational trust refers to an employee's belief that an employer will be honest, straightforward, and follow through on commitments (Gilbert & Tang, 1998). The characteristics of trust influence how an individual or an organization displays acts of trustworthy behavior. The elements of trust include expectations or belief and vulnerability— especially when dealing with another person's intentions or behavior (Lewicki & Bunker, 1996; Lewicki et al., 1998) and the feeling of defenselessness if the trust is violated.

Organizational trust has been shown to create a state of mind that results in organizational commitment that results in behaviors related to individual employee outcomes of performance, reward allocation decisions, and turnover. Additionally, it results in positive organization outcomes. These include; productivity, customer satisfaction, reduced costs, efficiency, and unit-level turnover (Podsakoff et al., 2009).

Organizational citizenship behavior is the willingness of the employee to provide help and assist others beyond one's work role, and with no direct reward (Organ, 1988). With high-technology organizations being so important to today's economy, and since there is increased

pressure put on these organizations through globalization, it is important that the US high-technology organizations achieve high degrees of organizational citizenship behavior. Increased levels of organizational citizenship behavior have been shown to elicit an increased willingness to engage in extra role behaviors, such as creativeness and innovativeness (Katz & Kahn, 1978), improved working relationships, a more comfortable organizational climate, growth, and organizational survival (Suliman & Iles, 2000).

Trust may be a key component to the development and maintenance of organizational citizenship behavior. It is a logical assertion that employees will not commit themselves to an organization that they do not trust (Hart, Capps, Cangemi, & Caillouet, 1986). How an employee perceives an organization is largely based on the amount of trust the individual has in leadership (Perry & Mankin, 2007). Likewise, when employees do not trust their leadership or the organization, they will be disengaged. This lack of engagement has been shown to result in poor performance. If the employee actually distrusts his organization, this can lead to counterproductive behaviors that can have a large impact on an organization's performance and success. The opposite of commitment would be alienation, which could lead to a distancing of the employee from the organization. As trust decreases, employees will be more likely to engage in counterproductive behaviors (Jensen & Raver, 2012; Lau, Au, & Ho, 2003; Sackett, 2003). This type of dysfunctional behavior can lead to a lack of effectiveness due to miscommunication (Meyer & Allen, 1997).

Employee productivity is affected by the behavioral actions of the leadership, either positively or negatively (Morgeson, 2005). Management may espouse the belief that workers are trustworthy, yet if management's behavior within the team, both in communications and action, does not reflect that belief, then the behavior will undermine the effort to develop trust and two-

way communication (Senge, 2006). Trust is at the core of all relationships, as many of the

inefficiencies in an organization are the result of employees' distrust in management. Without

trust, avenues of communication break down and disagreements become more prevalent. This

breakdown in communication and increased conflict will lead to inefficiencies, lack of employee

commitment, and loss of organizational productivity (Mishra & Morrissey, 1990).

The amount of trust individuals have in their leaders has emerged as a key concept in

several leadership theories. Building trust in their followers is a key aspect of both

transformational and charismatic leadership theories. An employee's perception that leaders

have trust-promoting attributes influences leader effectiveness (Bass, 1990; Hogan, Curphy, &

Hogan, 1994). The foundation of effective leadership is when leaders are perceived as having a

high degree of trust and are believed to practice ethical behavior. These are characteristics of an

authentic leader (Avolio, Gardner, Walumbwa, Luthans, & May, 2004). Authentic leaders are

self-confident, feel comfortable with their beliefs, motives, and values, and act on those values

and beliefs with transparency. Their followers trust them and believe they are ethical people. The

primary quality produced by authentic leadership is trust (Robbins & Judge, 2009). This

relationship is shown in Figure 1.

Leaders exhibit ethical & trustworthy behavior (Authentic leadership)	⟹	Employee perceives this and achieves a positive state of mind	⟹	Employee begins too trust in leadership and the organization
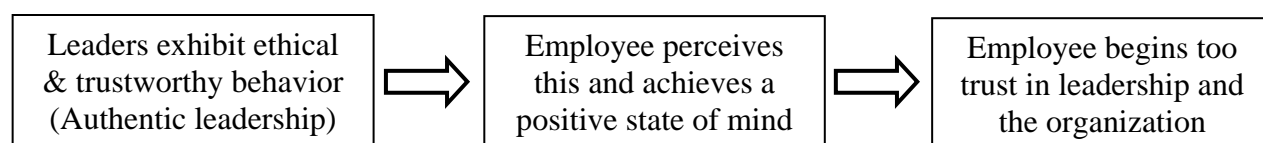
Figure 1. Authentic leadership to trust relationship diagram.

The behaviors of leadership in high-trust organizations must be consistent with the

behaviors that they profess. The leaders must *walk the talk* when they interact with others, so

that they can avoid eroding the trust that others have in them. Covey and Merrill (2006)

identified several key leadership behaviors that high-trust organizations have in common. High-

trust leaders talk straight, demonstrate respect, and create transparency. They right wrongs, show loyalty, get better, practice accountability, and deliver results. They also confront reality, clarify expectations, listen first, keep commitments, and extend trust. These behaviors demonstrate trust within the organization and help train the teams (Covey & Merrill, 2006).

Failing to project the strength of character that inspires trust may result in change and increased certainty of failure (Covey & Merrill, 2006). Developing trust between managers and subordinates will lead to improved relationships, and to employees that are more willing to participate in the decision-making process (Shen & Chen, 2007). This improved relationship becomes an enabler for employees to seek increased efficiencies and actively offer input and ideas, because they view themselves as an important part of the organization (Kolditz, 2007).

Statement of the Problem

The problem is that in today's economic environment there are many pressures put on leaders that may encourage them to act in ways that can cause them to lose the trust of their employees. Competitive pressures make it difficult for them to be honest and transparent with employees, stockholders, suppliers, and competitors. An employee's trust in his leader is the single most important factor in determining the success or failure of any organization (Covey & Merrill, 2006). As individual employee trust increases, the organization becomes stronger because individuals are better able to cope and adapt to pressures from within and outside the organization. This belief of the importance of trust was summed up by Bennis and Nanus (2003), when they wrote that, "trust is the emotional glue that binds followers and leaders together" (p. 142). This is a mutual trust that is not just an employee's trust in the leadership, but it is also a leader's trust in the employees, the organization's core values, the shared vision, and in the system itself.

Trust is a basic requirement for collaboration both within and outside of organizations. Without trust, it is difficult to lead effectively and make significant improvements. Managers who are unable to trust others cannot be highly effective. They have a tendency to either supervise the work of others too closely or do most of the work themselves. Employees listen to and accept guidance from leaders whom they trust. A trusting relationship with leadership has also been shown to improve an employee's ability to innovate (Ellonen, Blomqvist, & Puumalainen, 2008; Kouzes & Posner, 2007; Sankowska, 2012; Wang & Ahmed, 2004).

In a Pricewaterhouse-Coopers study of corporate innovation, that surveyed all companies listed in the Financial Times 100, it was found that trust was "the number one differentiator" (Kouzes & Posner, 2007, p. 225) between the top 20% of companies surveyed and the bottom 20%. The study also found that high-trust organizations had employees who were better at innovation, had a better understanding of the group's basic problems and goals, worked more diligently on solutions to problems, believed they had more influence on the outcomes of projects, and were more motivated to take action on decisions, than employees from low-trust organizations. Thus, the presence of a high degree of trust among employees can help facilitate the transformation of strategic goals into reality (Kouzes & Posner, 2007).

There is no exact formula for creating trust in an organization. Trust is a complex assortment of behaviors, actions, beliefs, intentions, motivations, expectations, assumptions, emotions, and feelings (Shockley-Zalabak et al., 2010). It is influenced by organization structure and leadership behaviors, and can be nurtured and grown, but it can also be easily destroyed. Since trust is critical for the success of organizations, leaders need to understand what to do, and not to do, to create a trusting organization. They need to measure trust to determine what

organization structure, environment, and leadership behaviors are creating or inhibiting organizational trust.

Purpose of the Study

Trustworthy behavior occurs when the foundational antecedents of culture and leadership in the working environment reach a point where employees believe that they can trust their leaders and the organization. Trust is the result of the combination of both cognitive and affective components. An understanding of these components and their effects on organizational commitment will enable leaders to understand if they have the proper antecedents to trust that will enable the trustworthy behaviors that are necessary for organizational performance.

Allen and Meyer (1990) identified three distinct underlying themes to organizational commitment. These are the employee's affective attachment to the organization (affective commitment), commitment as a perceived cost associated with leaving the organization (continuance commitment), and commitment as an obligation to remain with the organization (normative commitment). Furthermore, they argued that one can achieve a fuller understanding of an employee's relationship with an organization when all three forms of commitment are considered together.

The purpose of this quantitative correlational study was to identify what relationship, if any, existed between employees' trust in their leader and their organizational commitment, in a high-technology environment. The researcher's belief was that higher levels of trust would positively correlate with higher amounts of organizational commitment behavior.

Research Questions

The primary research question is:

To what extent, if at all, is there a relationship between an employee's trust in his leader and his amount of organizational commitment to the organization?

Three secondary research questions were studied to further define the relationship between trust and each of the three dimensions of organizational commitment as defined by Allen and Meyer (1990). A quantitative research study was used to answer the primary research question as well as the following secondary research questions:

1. To what extent, if at all, is there a relationship between an employee's trust in his leader and his amount of affective commitment to the organization?

2. To what extent, if at all, is there a relationship between an employee's trust in his leader and his amount of continuance commitment to the organization?

3. To what extent, if at all, is there a relationship between an employee's trust in his leader and his amount of normative commitment to the organization?

Significance of the Study

The study potentially has significant value to human resource practitioners and organization leaders. The study is of interest to HR practitioners because it draws attention to the importance of encouraging behaviors that will increase employee trust and organizational commitment. Numerous studies have documented the organizational benefits that are derived from trustworthy behaviors. Trustworthy behaviors have been shown to influence organizational citizenship behavior (Meyer & Allen, 1997; Organ, 1997; Organ & Ryan, 1995; Podsakoff et al.*,* 2009; Smith, Organ, & Near, 1983), employee retention (Aryee, Budhwar, & Chen, 2002; Connell, Ferres, & Travaglione, 2003; Hopkins & Weathington, 2006), and performance (Crant, 1996; Robertson, Gockel, & Brauner, 2012; Sulliman & Iles, 2000).

When employees trust their organization, they believe that the organization will treat them fairly and not deprive them of necessary support (Tan & Tan, 2000). This organizational trust fosters motivation and enables employees to focus on their jobs. This improved attitude and attention to detail ultimately results in improved organizational performance (Aryee, Budhwar, & Chen, 2002; Costa, 2003; Goris, Vaught, & Pettit, 2003; Tan & Lim, 2009).

Since trust serves as a foundation of all business dealings, building and restoring trust needs to be a major priority for leaders. Leaders need to start by developing a stronger foundation of credibility in order to gain the trust of the employees. If leaders espouse one set of values but personally practice another, people find them to be duplicitous. Likewise, if leaders practice what they preach, people are more willing to entrust them with their livelihood and even their lives (Kouzes & Posner, 2007).

Since high-trust organizations have employees that are better at innovation and problem solving, it is in the organization's best interest to capitalize on the benefits of this behavior in order to successfully compete in the global marketplace. The presence of a high degree of trust among the employees will help facilitate the transformation of strategic goals into reality (Kouzes & Posner, 2007).

This research study can be used to help leadership learn if its leadership style and organization structure are reaching the production employees at a sufficient level to enable them to trust. This trusting relationship with leadership is expected to have a positive effect on organizational citizenship behavior, which in turn results in improved attitudes (Costa, 2003), motivation (Dirks, 1999; Pool & Pool, 2007), job satisfaction (Costa, 2003; Hopkins & Weathington, 2006; Perry & Mankin, 2007; Pool & Pool, 2007; Robertson et al*.,* 2012;

Shockley-Zalabak, Ellis, & Winograd, 2000), and intention to stay with the organization

(Hopkins & Weathington, 2006; Pool & Pool, 2007).

Research Approaches to Trust

The study of trust has been looked at through a variety of different lenses, depending on

the discipline of the researchers who performed the study. According to Worchel (1979), the

different perspectives can be grouped into three general categories. The first category, used by

the personality theorists, focused on an individual's ability to trust others and on the social and

psychological needs that must be met to enable individuals to trust. Their research generally

studied how an individual's early childhood development is the origin of each individual's

readiness to trust. At this level, trust is conceptualized as "a belief, expectancy, or feeling that is

rooted in the personality and has its origins in the individual's early psychosocial development"

(Lewicki & Bunker, 1996, p. 115). A second category, comprised of the disciplines of

sociologists and economists, considered trust as an institutional phenomenon. They focused on

the observable behaviors that occur within and between institutions and the amount of trust

people put in those institutions. The third category was that of the social psychologists, who

focused on interpersonal transactions between individuals that create or destroy organizational

trust (Lewicki & Bunker, 1996).

What is Trust?

Trust is a difficult term to understand and define. One cannot simply say that *I trust* or *I*

distrust a person in all situations. Nor do categories such as conditional or unconditional (Jones

& George, 1998), or strong or weak (Barney & Hansen, 1994), capture it completely. On the

surface, one would suppose that anything to do with trust would be positive in nature, but that

may not always be true. In fact, the origin of the word itself actually offers an illustration of this

point. The word *trust* in English originated as the word *tryst*. The word was actually a hunting

term that was used to describe an expected behavior. During a hunt for small game, the animals

would be scattered from one end of a meadow towards a hunter at the other end of the meadow

who had a club. The hunter was expected to *stand tryst* and wait for the game to come to him.

Standing tryst meant for the hunter to be trustworthy in his assigned role and perform the task

that was assigned to him. Even in today's romantic use of the term, having a tryst with one's

neighbor's spouse entails a degree of trust between the two misbehavers even while one may be

violating the trust of his neighbor (Hardin, 2006). According to Hardin (2004), a person can say

that he fully trusts when three causal conditions are met. First, he believes the person will act in

his best-interest. Secondly, he believes the person will promote his interests even if the person's

interests do not coincide with his own, and lastly, he believes that the other person has the

competence to promote his interests. This relationship is depicted in Figure 2.
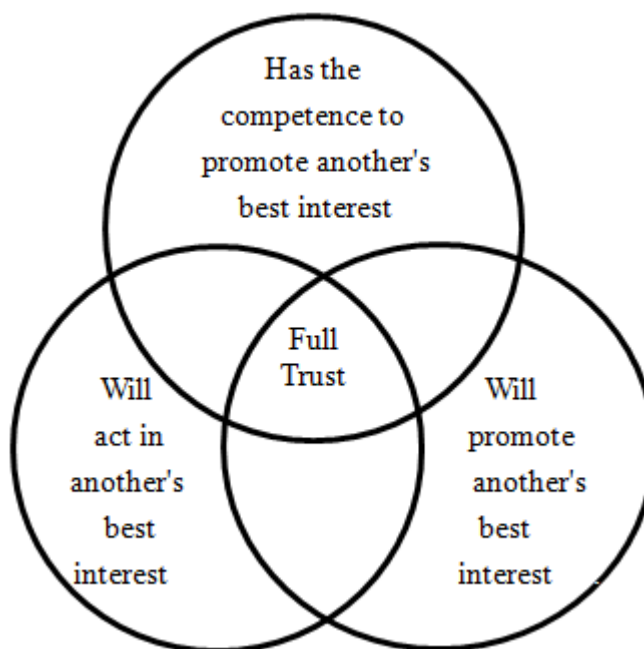
Figure 2. Requirements for full trust.

For the purposes of this dissertation, *full trust* was considered as the end point or the optimal degree of trust on a certain matter. The term *full* here actually qualifies the degree of trust to a certain situation, not a range of situations. In other words, you may fully trust an individual in some issues, but not in others (Hardin, 2004). For example, one may fully trust one's doctor to provide sound medical advice, but you may not fully trust any legal advice the doctor provides to you (Hardin, 2004). In fact, a person may fully trust in one context, but actually distrust that person in another dimension at the same time (Lewicki et. al., 1998).

Traditionally, scholars have seen trust and distrust as separate and opposite, mutually exclusive conditions. They see trust as good and distrust as bad. They understand distrust to be the expectation that others will not act in the other's best interest (Barber, 1983). Personality researchers, however, perceive trust and distrust as opposite ends of a single trust-distrust continuum (Rotter, 1971). Lewicki et al., (1998) introduced an enlightened view of the trust-distrust relationship by defining trust and distrust in reciprocal terms. They contend that trust and distrust are not at opposite ends of a single trust-distrust continuum and that the opposite of trust is not distrust. They viewed trust and distrust as separate and distinct constructs.

Researchers have not been consistent when discussing distrust. They used different terms (i.e., lack of trust, distrust, mistrust and suspicion), often interchangeably, to discuss the same concept. Researchers have also theorized distrust in many different ways. It has been characterized as: violations of trust (Lewicki & Bunker, 1995; McAllister, 1995), low levels of trust (Dirks & Ferrin, 2001), the absence of trust (Gilbert & Tang, 1998), one end of the continuum of trust (Shockley-Zalabak, Morreale, & Hackman 2010), and as orthogonal to trust (Lewicki, et al., 1998).

The prevailing definition of distrust that is emerging from the literature is similar in construct to that defined by Lewicki et al. (1998) as "confident negative expectations regarding another's conduct" (p. 439). In this definition, distrust is viewed as the opposite of trust, but exists at opposite ends of the same continuum. There is evidence that positive (trust) and negative (distrust) attitudes are not opposite ends of a single trust-distrust continuum, but exist in different domains, where distrust is not the opposite of trust (Lewicki et al., 1998). This relationship of trust and distrust being two separate domains is illustrated in the *trust-distrust continuum diagram* is shown in Figure 3 and discussed in the next section.
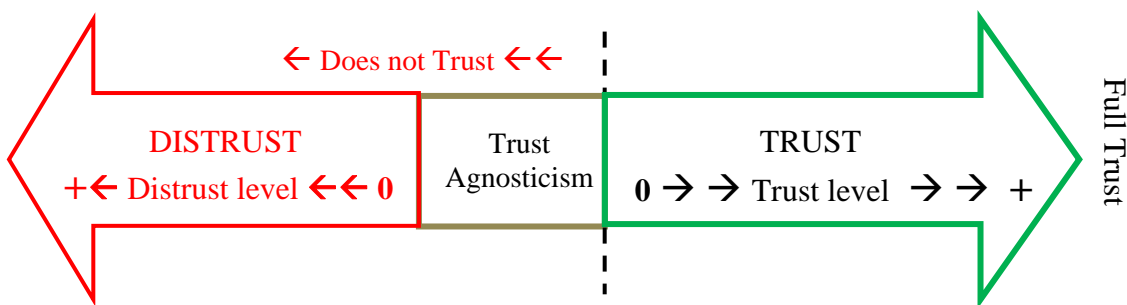
Figure 3. Trust-distrust continuum diagram.

Trust-Distrust Continuum Diagram

In this model, distrust is shown along a separate and distinct continuum than is the continuum of trust. Both continuums begin with either *no trust* or *no distrust,* and are separated by an *agnostic zone*, where trust ambiguity exists. This system model represents the relationship between trust and distrust, but only the relationship of a single organizational domain. As an example of different domains, the first survey question used to measure organizational trust in the Organizational Trust Inventory (OTI) is: "We think the people in (*Organization X*) tell the truth in negotiations" (Cummings & Bromiley, 1996, p. 328). In this case, the model can be used to accurately represent the sphere of influence for the relationship of trust and distrust because it is specific in the domain of truth in negotiations. A more complicated model would be necessary

to describe domains with multiple constructs, which may contain both positive and negative elements. An example of this might be a statement like: *I trust my supervisor*. Without narrowing down the trust to a specific domain, it is not possible to determine where it would fit on the continuum. It is possible that the individual may have a high level of trust his supervisor in some respects, like *to be competent*, but a low level of trust in another domain, like *to be ethical*.

Research has shown that it is common for trust and distrust to occur at the same time, resulting in an ambivalent attitude towards both trust and distrust. Ambivalence is a state of attitudinal indifference or uncertainty, a neutral midpoint between extreme perceptions when positive and negative attitudes toward a single target coexist (Priester & Petty, 1996). This is an emotional state where the person is agnostic in his belief of trust and distrust. This area of ambivalence, where there is neither trust nor distrust, is shown as the *agnostic zone* in Figure 3. The diagram shows that the *does not trust* zone includes the *agnostic zone*, but the *distrust zone* does not include this area of ambivalence because may not trust, but will not distrust another without a reason.

Stages of Trust Development

Lewicki and Bunker (1995) identified different levels of trust that where extended from the work of Shapiro, Sheppard, & Cheraskin (1992). They defined a model of escalating trust that is based on the premise that the parties are entering into a new relationship, that they have no previous experience or data to taint their feelings, are uncertain about each other, believe they are vulnerable if they disclose too much, and are uncertain about the future of the relationship. They suggest that there are escalating levels of trust that start initially *calculus-based trust*, turning into *knowledge-based trust*, and evolving into *identification-based trust*. The relationship of the

growing nature of trust and the area of *full trust* as described by Hardin (2004) is illustrated in

the *Stages of trust growth diagram* is shown in Figure 4 and discussed in the next section.
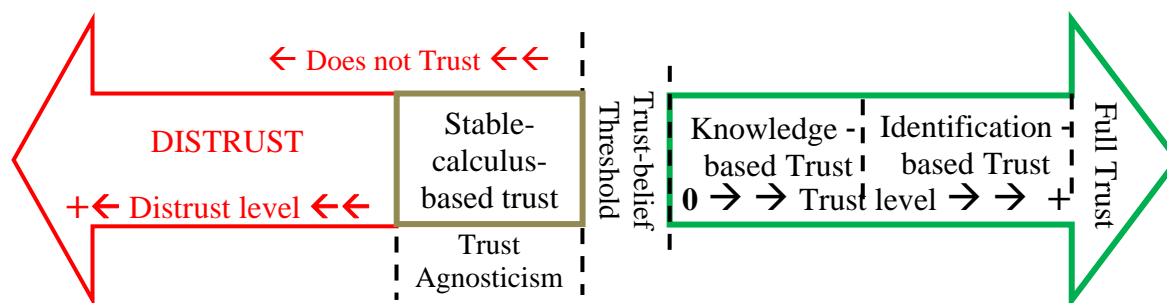
Figure 4. Stages of trust growth diagram.

Calculus-based trust. Lewicki and Bunker (1995) describe *calculus-based trust* as the

lowest level of trust. This type of trust is based on consistency of behavior, where you can trust

another to do what he says he will do. In *calculus-based trust*, people tend to operate on a

reward/punishment basis, where completing their work is not seen as personal satisfaction, but

rather because of consequences of not doing so and to protect their reputations. In this level,

trust is built very slowly, one step at a time. It is also a fragile form of trust, where, if one

perceived violation of trust occurs, it is possible for an individual to immediately slip back

several steps back along the continuum of trust and need to begin to rebuild the trust again

(Lewicki et al., 1998).

For the purposes of this dissertation, calculus-based trust was not considered to be trust.

The individual is not trusting of their own free will of emotional belief and there is no

expectation of goodwill. In Figure 4 this trust level is depicted on the *does not trust* side of the

model because the individual only *trusts* due to the threat of external sanctions or force and the

expectation of compliance. Additionally, this level of trust is only considered trust when the

cost-benefit analysis makes it worth-while to do so.

Trust actually begins when *the trust-belief threshold* is crossed. This is when the total amount of confidence one has in the other party's beneficent motives, abilities, and reliability has reached a point that it overcomes the individuals doubt and uncertainty. This inherent lack of trust is referred to as the individual's *propensity to trust* (Butler, 1991).

Knowledge-based trust. This beginning trust state, defined as *knowledge-based trust*, is grounded in an understanding of the other person's predictability. It presumes that one can anticipate the other's behavior. It develops over time, largely due to repeated interactions that allow each party to develop an expectancy that the other's behavior is predictable and trustworthy (Lewicki et al*.,* 1998; Rotter, 1971). There are three dimensions to *knowledge-based trust*. First, as information continues to flow to the other party, predictability improves and trust increases. Secondly, predictability will increase trust, even if the other is predictability untrustworthy, because the ways the other will violate trust can be predicted. Lastly, accurate understanding requires repeated interactions over multidimensional relationships in order to develop this level of trust (Shapiro et al., 1992). This trust can eventually evolve into a trust state known as *identification-based trust*.

Identification-based trust. In *identification-based trust,* parties have come to know and understand the expectations of one another. They have developed the ability to know what one another would want in a given situation, have taken the initiative of acting for each other in certain situations, and through interactions have developed a collective identity. Trust has grown to a point where an individual has not only learned and can predict the other's needs, choices, and preferences, but also shares those needs, choices, and preferences as their own (Lewicki & Bunker, 1995). Although Lewicki and Bunker identified specific names for the stages of trust,

there are levels of trust within each of these stages. Both trust and distrust get stronger or weaker based on interactions between the trustor and the trustee.

In professional relationships, trust improves gradually as the degree of trust moves along the continuum from one trust level to another. The more one interacts and communicates with another, the more predictable that person becomes and the higher the level of trust becomes. This degree of trust continues to escalate along the continuum as long as a violation of trust does not occur. If a violation does occur, the individual may lose trust or begin to distrust (Hardin, 2001).

Distrust. When an individual lacks the belief that another intends to act in their best interest in a certain matter, they do not trust the other person. However, they may not distrust the other person either. They begin to distrust the other person when they believe that the other person is going to act against their best interest. Notice in the trust-distrust relationship system model that the does not trust zone includes the agnostic zone by beginning at the trust-belief threshold, not at the beginning of the distrust zone.

By trusting somebody else, we open up ourselves to the opportunity to be betrayed, but also to the sense that we cannot be sure of him. According to Hardin (2001), "it would be impossible for individuals in their daily interactions to escape the suspicion of distrust because the suspicion is inherently well grounded" (p. 500). He states four reasons for this skepticism. First, the person may have changed his mind between the time the opinion was formed and the belief was acted upon. Secondly, the person may have tailored his opinion in order to gain advantage over the other person's sentiment. This does not need to have been by malicious intent, but may be because the person had not fully thought through his opinions on the subject and was merely being supportive at the time. A third possibility is that, if the trust was based on

iterated exchange interactions, the person's opinion had changed due to a change in the conditions or a larger incentive. A fourth reason is that, although not attempting to be dishonest, the person may have just been being too nice for social reasons. He was covering the facts, but may not have been articulating his true feelings (Hardin, 2001).

The decline and repair of trust. While it takes time and exchange interactions to progress to higher levels of trust, the decline of trust can happen quickly. When a party in a trusting state perceives that a violation of trust has occurred, the individual assesses the situation on both cognitive and emotional levels and may change his trust belief. If the event can be dismissed as a simple temporary episode or situation caused, then it may be ignored.   If not, the individual will revise his state of trust to a new level or, if the perceived violation of trust is severe, then the individual will decide to either not trust or distrust the other. The resulting state will be dependent of the initial level of trust and the seriousness of the violation of trust (Lewicki & Bunker, 1996). This relationship of the loss of trust is illustrated in Figure 5 and discussed in the next section.

Untrustworthy behavior

← Does not Trust ←←

DISTRUST

+← Distrust level ←← 0

Stable-
calculus-
based trust

Trust
Agnosticism

Trust-belief
Threshold

Knowledge -
based Trust

Identification
based Trust

0 → → Trust level → → +

Full Trust

Trust repair behavior
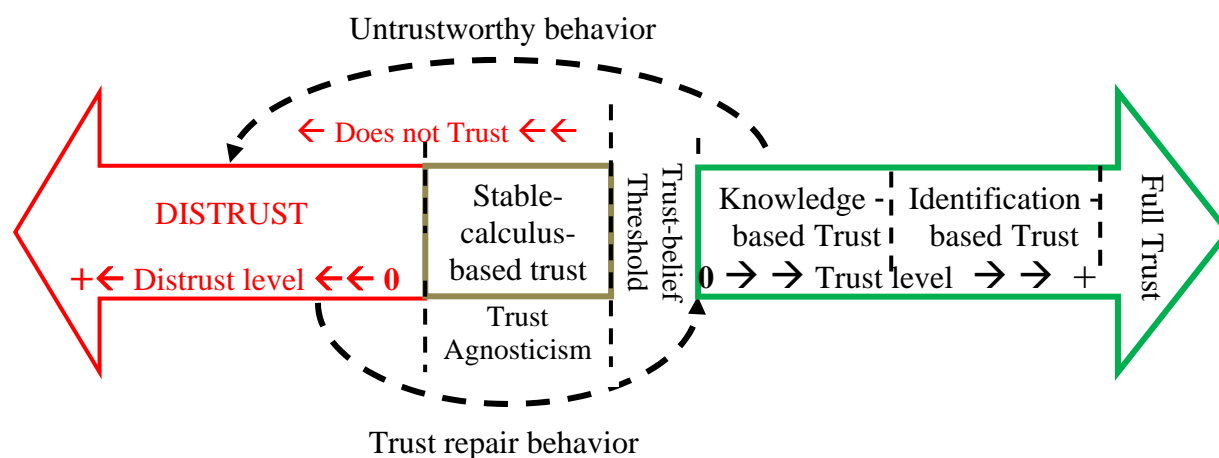
Figure 5. Decline and repair of trust.

If a violation of trust does occur, it may be possible to repair the trust. As soon as the violation of trust occurs, the violator must recognize and acknowledge that a violation has

occurred, determine that he was at fault, and admit what caused the violation. A violator of trust

must acknowledge that the act was destructive, and accept responsibility for the effects of his

actions (Lewicki & Bunker, 1996).

Definition of Terms

The following key terms and definitions are relevant to this study.

Affect-based trust: An emotional connection to someone that develops from a sense of

feelings and motives (Lewis & Weigert, 1985; McAllister, 1995).

Affective commitment: A component of organizational commitment that describes an

employee's attachment, identification, and involvement with his organization. It is the

psychological link between individual employees and the organization (Meyer & Allen, 1991).

Authentic leadership: A leadership style characterized by leaders who are deeply aware

of how they think and behave and are perceived by others as being aware of their own and

others' values/moral perspectives, knowledge, and strengths; aware of the context in which they

operate; and who are confident, hopeful, optimistic, resilient, and of high moral character

(Avolio et al.*,* 2004).

Calculus-based trust: Trust due to the threat of external sanctions or force and the

expectation of compliance where there is no expectation of goodwill.

Cognition-based trust: The belief or perception about someone based on knowledge,

history, and experience (Lewis & Weigert, 1985; McAllister, 1995).

Continuance commitment: A component of organizational commitment that refers to an

individual's awareness of the costs associated with leaving the organization (Meyer, Allen, &

Smith, 1993).

Counterproductive behavior: Any intentional behavior by an employee that is viewed as contrary to the organization's legitimate interests.

Distributive justice: The type of justice conceptualized as fairness associated with outcomes of decisions and the distribution of resources.

Distrust: The expectation that capable and responsible behavior will not be forthcoming and one will not act in another's best interest.

Extra-role behavior: "Behavior that attempts to benefit the organization and that goes beyond existing role expectations" (Organ, Podsakoff, & MacKenzie, 2006, p. 33).

Full trust: The term used to indicate the highest trust state obtainable (Hardin, 2004). It is the highest level of identification-based trust.

Identification: The concept that represents the amount that individuals' identify with the organization's goals, norms, values, and beliefs (Shockley-Zalabak et al*.,* 2010).

Interactional justice: The degree of dignity and respect shown to those affected by decisions, focusing on the interpersonal treatment people receive when procedures are implemented.

Interpersonal trust: The type of justice conceptualized when a person is willing to act based on the actions, words, and choices of another (McAllister, 1995).

Identification-based trust: Trust that is based on the other's desires and intentions, where the parties understand and appreciate each other's wants.

Knowledge-based trust: Trust that is based on behavioral predictability that comes from a history of interactions.

Normative commitment: A component of organizational commitment that refers to an individual's feeling of obligation or moral belief to remain with the organization on the basis of sociological experiences (Meyer et al., 1993).

Organizational citizenship behavior: "Performance that supports the social and psychological environment in which task performance takes place" (Organ, 1997, p. 95).

Organizational commitment: A construct that refers to the psychological attachment an individual has to the organization. For this study, organizational commitment will be measured using Meyer and Allen's (1991) multidimensional model comprised of the affective, normative, and continuance commitment.

Organizational commitment scales: An instrument that measure the subscales of organizational commitment that reflect the amount of affective, continuance, and normative commitment an individual has for an organization (Meyer & Allen, 1991).

Organizational trust: An employee's belief that an employer will be honest, straightforward, and follow through on commitments (Gilbert & Tang, 1998).

Organizational Trust Inventory (OTI): A validated survey that measures three dimensions of organizational trust. It is used to measure an individual's level of trust in his or her supervisor in an organization (Cummings & Bromiley, 1996).

Positive psychological capital: The positive and developmental state of an individual as characterized by high self-efficacy, optimism, hope, and resiliency (Luthans & Youssef, 2004).

Procedural justice: The type of justice that is concerned with the fairness and the transparency of the processes by which decisions are made.

Propensity to trust: The propensity to trust is a stable individual difference that affects the likelihood that a person will trust. Individuals differ in the extent to which they trust others

in general (Rotter, 1967; Colquitt, Scott, & LePine, 2007). Some of the factors that affect an employee's propensity to trust others are based on life experiences, personality type, cultural background, and education (Mayer, Davis, & Schoorman, 1995).

Transformational leadership: A leadership style that enhances the motivation, morale, and performance of followers by connecting the follower's sense of identity and self, being a role model for followers that inspires them and makes them interested, challenging followers to take greater ownership for their work, and understanding the strengths and weaknesses of followers, so that the leader can align followers with tasks that enhance their performance (Bass, 1990).

Trust: The extent that two or more independent individuals, in a vulnerable situation, have self-assured expectations of the other with regard to competence, honesty, openness, and reliability (Barber, 1983; Mayer et al., 1995).

Trust agnosticism: There is a state of attitudinal indifference or uncertainty, a neutral midpoint where a person has not decided to trust or to distrust another in a certain aspect.

Trust-belief threshold: There is a theoretical state of mind that represents the total reluctance to trust. A point where a person's propensity to trust, perception of risk, rewards, and identification must be overcome by the antecedents to trust for a trustworthy state of mind to exist.

Assumptions

Some assumptions had to be made so that the study would be feasible. The most salient of these are as follows:

1. The participants were truthful in their responses to the survey questions and did not have personal biases when answering questions.

2. The employee beliefs and behaviors would be consistent across the sampled organization and with other similar organizations.

3. The sample of employees was representative of the organization as a whole.

4. When analyzing the results of the study, it was assumed that the word scale could be treated as an ordinal scale when performing statistical analysis.

Limitations

Creswell (2003) posited that all statistical procedures have limitations. He added that a discussion of such limitations is useful to other researchers who may conduct similar studies. There are numerous aspects of the study that could not be adequately controlled and therefore became limitations inherent to the study. Some of these limitations were:

1. The study would be limited to departments of high technology organizations. The results of the study might or might not be relevant to other organizations, due to different and unknown leadership qualities and subcultures.

2. The results might not be applicable to other organizations because the study was limited to a specific industry.

3. Since the surveys were provided without oversight of the researcher, once the respondent received the survey, it was beyond the researcher's control. Respondent might attach a different personal meaning to the questions.

4. The results would also be specific to only organizations that have a similar culture. The study was specific to high-technology organizations with similar cultures, organizational structures, and leadership styles.

5. The results might only be relevant to organizations where the hourly employees are represented by a union.

6. The validity of the data was limited to the information collected in the survey. The study assumed that the employees were honest in their responses and that the responses could be extrapolated to the organization as a whole.

The scope of the study has been limited to high-technology organizations and controls were put in place to ensure that the respondents remained anonymous. It was expected that the study would provide meaningful data on the importance of trust in high-technology organizations.

Summary

Chapter I began with the challenge faced by high technology industries to compete and thrive in this global environment. These organizations need effective leaders who can motivate followers to achieve organizational goals and objectives. Trust was shown to be an antecedent to organizational success. Since the decision to trust is based on a belief, it has an affective component. It is critical for organization to have an environment that elicits the commitment of its employees. High amounts of trust are antecedents to an employee's organizational commitment. Employees who have high levels of organizational commitment will contribute more to the organization than those with lower levels of commitment. Additionally, the chapter explained how productivity is affected, either positively or negatively, by the behavioral actions of the leadership.

Chapter II: Review of Literature

Discussion

In today's economic environment, there are many pressures put on leaders that make it difficult for them to be honest and transparent with employees, stockholders, suppliers, and competitors (Friedman, 2006; Shockley-Zalabak et al., 2010). Being honest and transparent has been shown to increase both interpersonal and organizational trust. Research has shown that trust is the single most important factor in determining the success or failure of any organization (Covey & Merrill, 2006). As organizational trust increases, the organization becomes stronger and more able to cope and adapt to pressures from within and outside the organization. This belief in the importance of trust was summed up by Bennis and Nanus (2003), when they wrote "trust is the emotional glue that binds followers and leaders together" (p. 142). This type of trust is a mutual trust. It is not just a trust in the leadership, but it is also a leader's trust in the employees, the organization's core values, their shared vision, and in the system itself (Bennis & Nanus, 2003).

Organizational trust establishes a foundation that is necessary for productivity and creates an environment that encourages a culture conducive to teamwork and cooperation. This permits employees to focus on the tasks before them (Daley & Vasu, 1998). Trust is a basic requirement for collaboration within and outside of organizations. Without trust, it is difficult to lead effectively and make significant improvements. Managers who are unable to trust others cannot be effective. They have a tendency to either supervise the work of others too closely or end up doing most of the work themselves. Employees will listen to and accept guidance from leaders that they trust (Kouzes & Posner, 2007).

Definition of Trust

Trust is commonly defined by researchers as the extent that two or more interdependent

individuals in a vulnerable situation have self-assured expectations of the other with regard to

their competence, honesty and openness, and reliability (Barber, 1983; Mayer et al*.,* 1995;

Mishra, 1996). There is no commonly accepted definition of trust. Deutsch (1960) studied the

effect of motivational consequences on trusting behavior using a two-person prisoner's dilemma

game. In this scenario, two prisoners were accomplices in the same crime. Each prisoner is

offered a deal for implicating the other for the crime and receiving a reduced sentence. The

dilemma faced by the prisoners is that, whatever the other does, each prisoner is better off

confessing than remaining silent. A theorized example of this relationship is illustrated in the

matrix shown in Figure 6.

		Prisoner B	
		Confesses	Keeps quiet
Prisoner A	Confesses	Both go to jail for five years.	Prisoner B goes to jail for ten years. ……………….. Prisoner A goes to jail for one year.
	Keeps quiet	Prisoner A goes to jail for ten years. ……………….. Prisoner B goes to jail for one year.	Both go to jail for two years.

Figure 6. Prisoner's dilemma matrix.

In the prisoner's dilemma, the outcome obtained when both confess is worse for each

than the outcome they would have if both remained silent. Deutsch's results found that the

concepts of *expectation* and *intent* would increase the chance of participating in trusting

behavior. Cummings and Bromiley (1996) assert that affective, cognitive, and intended behaviors are three distinguishable components of organizational trust. They further contend that the three behavioral dimensions of whether an individual keeps commitments, negotiates honestly, and avoids taking excessive advantage correlate to those three components.

Research Approaches to Trust

Research into trust has not been consistently studied. It has been studied from the disciplines of psychology (Rotter, 1971), political science (Barber, 1983), sociology (Zucker, 1986), economics (Dasgupta, 1988), and management (Carnevale, 1995; Kramer & Tyler, 1996). Sometimes it was studied as a personal trait (Rotter, 1971), between individuals (Johnson-George & Swap, 1982), within public institutions (Carnevale, 1995), between organizations (Gulati, 1995), as a general characteristic of different societies (Fukuyama, 1995), or between individuals and social institutions (Zaheer, McEvily, & Perrone, 1998). The various approaches in background, methods, and goals of the researchers have resulted in a conglomerate of ideas and definitions without a solid foundation (Beccerra & Gupta, 1999). Thus the research data represent dyadic relationships between individuals, groups of individuals, organizations, and societies.

Trust has been studied by most of the social sciences, including anthropology, economics, history, political science, psychology, sociology, and sociobiology, with each discipline approaching the studies with its own disciplinary filters (Kramer & Tyler, 1996). These different perspectives can be grouped into three general categories. The first category, used by the personality theorists, focused on an individual's ability to trust others and on the social and psychological needs that have to be met to enable individuals to trust. Their research generally studied how an individual's early childhood development is the origin of each

individual's readiness to trust (Worchel, 1979). A second category is comprised of the disciplines of sociology and economics, considered trust as observable occurrences that happen within organizations. This is the trust that individuals have within and between organizations. The third category, composed of the social psychologists, who studied how behaviors have an impact on building up or degrading the amount of trust an individual has in other people and in other organizations (Worchel, 1979).

Trust as a Social Concept

Lewis and Weigert (1985) contend that since there is no need to trust outside of a sociological setting, the primary function of trust is sociological rather than psychological. They postulate that interpersonal trust has cognitive and affective foundations (Lewis & Weigert, 1985). Research has shown that *cognition-based trust* and *affect-based trust* represent two distinct forms of interpersonal trust that are positively correlated to improved performance (Erdem & Ozen, 2003; McAllister, 1995). Cognitive trust is formed when someone is perceived as responsible, reliable, and competent. When individuals demonstrate these characteristics others will hold the *rational* belief that they can be trusted. Affective trust is an emotionally based interpersonal trust that is based mostly on feelings and intuition. It is most commonly formed when someone demonstrates his care and concern for another's welfare. An individual decides to trust another person (or persons) because that other person (or persons) seems (seem) to have his best interest at heart. However, unlike cognitive trust, the individual is hardly aware of the rational reasons for trusting this person. Affect-based trust is more of an emotional response to be treated in a way that makes the individual feel valued, protected, and cared for.

A common theme in most of the trust literature is that both cognitive and affective roles play a part in developing organizational trust. This is described by Lewis and Weigert (1985) as:

Trusting behavior may be motivated primarily by strong positive affect for the object of

trust or by good rational reasons why the object of trust merits trust, or more usually,

some combination of both. Trust in everyday life is a mix of feeling and rational

thinking. (p. 972)

Interpersonal trust has cognitive and affective foundations (Lewis & Weigert, 1985;

McAllister, 1995; Rotter, 1971). Saying that trust is cognition based means that "we choose

whom we will trust in which respects and under what circumstances, and that we base the choice

on what we take to be 'good reasons', constituting evidence of trustworthiness" (Lewis &

Weigert, 1985, p. 970). C*ognition-based trust* involves using knowledge and judgment to

deliberately decide whom to trust and under which circumstances. When researching the

theoretical frameworks of trust, Dirks and Ferrin (2001) discovered that trust can both facilitate

and hinder behavior and performance. In contrast, the affective or emotional dimension of

interpersonal trust is an emotive affiliation between the members of the relationship (Deutsch,

1960). This type of bond is characterized by an emotional attachment, similar to the bonds of

friendship and love. Likewise, when a betrayal of trust arises, the result is a defeated state of

emotions. This emotional component is present in all types of trust, but it is usually more intense

in close interpersonal trust (Lewis & Weigert, 1985; Williams, 2001).

Trust Formation

Researchers have different philosophies on how trust forms in organizations. One

perspective is that trust is an element of the leader-member exchange theory (Schriesheim,

Castro, & Cogliser, 1999). This theory postulates that leaders attempt to make subordinates feel

that they are part of the in-group and, by doing so, avoid the negative implications of being in the

out-group (Northouse, 2010). The follower sees the relationship with his leader as one that is

based on trust, goodwill, and the perception of mutual obligations (Blau, 1964). Researchers

have used this relationship-based perspective to describe how trust elicits citizenship behavior

(Konovsky & Pugh, 1994).

A second perspective, as proposed by Mayer and Gavin, (2005) focused on the leader's

character and how it influences a follower's sense of vulnerability. They proposed that when

followers believe in the integrity, capability, and benevolence of their leader, they will be more

comfortable engaging in behaviors that put them at risk. Mayer and Gavin (2005) suggested that

when employees believe their leaders cannot be trusted, they will divert their energy to covering

their backs, which detracts from their work performance. This is referred to as a character-based

perspective. In each of these perspectives, trust is a belief or perception held by the follower. It

is not a characteristic of the leader or of the relationship (Dirks & Ferrin, 2002).

Stages of Trust Development

McKnight, Cummings, and Chervany (1998) proposed that at the onset of a new

relationship, the amount of trust one has in another will be at a low level, and will gradually

increase over a period of time as the relationship develops. The amount of trust one individual

has in another requires a series of interactions, within a certain context with another, so that trust

can develop. One cannot simply say that *I trust* or *I distrust* a person in all situations. Nor do

categories such as *conditional* or *unconditional* (Jones & George, 1998), or *strong* or *weak*

(Barney & Hansen, 1994), capture it completely. The amount of trust an individual has actually

lies on a continuum of intensity (Lewicki & Bunker, 1996). This continuum can be categorized

into qualities of trust that have general elements to them that can be used to describe the different

attributes of both trust and distrust.

The lowest level of trust, *calculus-based trust* as described by Lewicki and Bunker (1995), does not meet the standard of trust as defined in this dissertation. This is not trust, because the individual only *trusts* due to the threat of external sanctions or force and the expectation of compliance. In other words, there is no expectation of goodwill (Lewicki, & Bunker, 1995). The middle range of trust levels, referred to as *knowledge-based trust*, is grounded in an understanding of the other person's predictability. This type of knowledge presumes that one can anticipate the other's behavior. There are many dimensions to *knowledge-based trust*. First, as information continues to flow to the other party, predictability improves and trust increases. Secondly, predictability will increase trust, even if the other is predictability untrustworthy, because the ways the other will violate trust can be predicted. Lastly, accurate understanding requires repeated interactions over multidimensional relationships in order to develop (Shapiro, Sheppard, & Cheraskin, 1992). The highest level of trust is *identification-based trust*. This trust is based on the other's desires and intentions. In this trust, the parties understand and appreciate each other's wants. Trust grows as an individual not only learns and can predict the other's needs, choices, and preferences, but also shares those needs, choices, and preferences as their own (Kramer & Tyler, 1996).

According to Hardin (2004), one can say that he *fully trusts* when the following three causal conditions are met. First, he believes the person will act in his best interest. Secondly, he believes the person will promote his interests even if that person's interests do not coincide with his interest. And lastly, he believes the other person has the competence to promote his interests. The term *full* here actually qualifies the degree of trust to a certain matter, not a range of matters. In other words, one may fully trust an individual in some matters, but not at all in other matters (Hardin, 2004). This is described in the research literature as the many dimensions of trust. An

example of this is that someone may fully trust his doctor to give the correct medical advice, but he may not fully trust any legal advice the doctor provides to him.

The behaviors of leaders must be perceived as following the values that they profess. If leaders don't *walk the talk*, their employees will not take to heart the message that they profess. According to Ghandi, "the moment there is suspicion about a person's motives, everything he does becomes tainted" (Covey & Merrill, 2006, p. 8). Trust is the one thing that changes leadership behavior. Whether the changes are to the benefit of the organization or the detriment will depend of the quality of the leader's behavior. The more one interacts and communicates with another, the more predictable that person becomes and the higher the trust level becomes. This degree of trust continues to escalate along a continuum of intensity as long as a violation of trust does not occur.

Trust – Distrust Continuum

The amount of trust anyone currently has in someone can be viewed as a point on a continuum where *full trust* would lie at one end and *distrust* would lie at the other end. Specifically where along this continuum, the amount of trust or distrust one has for another is difficult to determine. It is also possible that a person may not trust or distrust another. This would mean the person is agnostic with respect to this matter (Hardin, 2004). This and the other relationships to trust and distrust are illustrated in the *trust-distrust relationship continuum* that was provided in Figure 3.

When a person distrusts someone, the person clearly is not trusted. It is possible however, that a person does not trust someone, but does not really distrust the person either This initial state of mind exists where a person has not decided to trust, not trust, or to distrust another in some aspect. This mental state is described as the zone of *trust antagonism* (Hardin, 2004)

and includes the initial trust level of *calculus-based trust*. Once a person has the affective and cognitive impetus to overcome his *trust-belief threshold*, he begins to trust. This begins with *knowledge-based trust* that will eventually turn into a higher level of trust, characterized by a concern for each other's desires and intentions, where the parties understand and appreciate each other's wants. This is known as *identification-based trust* (Lewicki & Bunker*, 1996). Rotter (1967) recognized that individuals differ in the extent to which they trust others in general. This trait is referred to as an individual's *propensity to trust*. This inherent obstacle to trust must be overcome for a person to begin to trust. This mental state is referred to as the *trust-belief threshold*.

The Decline of Trust

Many research studies have concluded that it is easier to reduce trust levels than it is to increase them (Barber, 1983; Janoff-Bulman, 1992; Meyerson, Weick, & Kramer, 1996). This fragility of trust was argued by Slovic (1993) to arise from a variety of cognitive factors contributing to differences between the building up and lowering of trust levels. The first reason is that events that lower trust are more visible than events that increase trust level. Second, these trust-lowering events carry more weight than trust-building events. Lastly, "sources of bad (trust-destroying) news tend to be seen as more credible than sources of good news" (Slovic, 1993, p. 678). According to Hardin (2001),

> It would be impossible for individuals in their daily interactions to escape the suspicion of distrust, because that suspicion is inherently well grounded. The slogan, *every betrayal begins with trust*, suggests not only that it is principally when we trust or rely on someone that [he] can betray us but also the sense that we cannot be sure of another. (p. 500)

Hardin (2001) states four reasons for this skepticism. First, the person may have changed his mind between the time the opinion was formed and the belief was acted upon. Secondly, the person may have tailored his opinion in order to gain advantage over the other person's sentiment. This does not need to have been by malicious intent, but may be because the person had not fully thought through his opinions on the subject and was merely being supportive at the time. A third possibility is that, if the trust was based on iterated exchange interactions, the person's opinion had changed due to a change in the conditions or a larger incentive. A fourth reason is that, although not attempting to be dishonest, the person may have just been being too nice for social reasons and, while covering the facts, may not have been articulating his true feelings.

The Repair of Trust

It is impossible for individuals to escape the suspicion of distrust because the suspicion is inherently well grounded. When trust has been broken, or organizations are perceived as being untrustworthy, they must transform their organizations to become more trustworthy. Lewin (1947) argued that when part of the core cognitive structure has to change in more than a minor way, the organization needs to go through a disequilibrium called *unfreezing* to force a coping process. Transformative change implies that employees in the organization must unlearn something as well as learn something new. Once the organization has been *unfrozen*, the change process can begin, and new behaviors can be learned. Once these new behaviors have been confirmed and reinforced by environmental or external sources, the behaviors are validated, become *refrozen*, and form the basis of the new set of operational norms (Schein, 2004). If a violation of trust has occurred, the trust can be repaired by recognizing and acknowledging that a violation has occurred, determining and admitting what caused the violation, acknowledging that

the act was destructive, and finally accepting responsibility for the effects of one's actions

(Lewicki & Bunker, 1996).

Measurement of Trust

The amount of trust an individual has in another, or in an organization, is difficult to

quantify. A person cannot simply say that he trusts or distrusts a person or an organization. Nor

do categories such as *conditional* or *unconditional* (Jones & George, 1998) or *strong* or *weak*

(Barney & Hansen, 1994) capture it completely. The degree of trust that one person has in

another lies upon a continuum of intensity (Hardin, 2001). This continuum can be categorized

into degrees of trust that can be used to describe the different aspects of the trust experience.

These different perspectives can be grouped into the three general categories (Worchel, 1979).

Recall that, according to Lewicki and Bunker (1996), the lowest level of trust is *calculus-based*

trust. This is actually not trust at all, but ambivalence or distrust, because the individual only

trusts due to the threat of external sanctions or force and the expectation of compliance, because

there is no expectation of goodwill. A middle range of trust levels is referred to as *knowledge-*

based trust. It is grounded in an understanding of the other person's predictability. According to

Shapiro et al. (1992), there are many dimensions to knowledge-based trust. First, as information

continues to flow to the other party, predictability improves and trust increases. Second,

predictability will increase trust, even if the other is predictably untrustworthy, because the ways

the other will violate trust can be predicted. Lastly, an accurate understanding requires repeated

interactions over multidimensional relationships in order for trust to develop. *Identification-*

based trust is the highest level of trust. This trust is based on the other's desires and intentions.

At this level of trust, the parties understand and appreciate the other's wants. This type of trust

grows as individuals learn to predict another's needs, choices, and preferences and then shares

those needs, choices, and preferences as their own (Kramer & Tyler, 1996).

The Importance of Trust

According to Lewicki et al. (1998), the need for trust arises from our inherent

interdependence with others. We often depend on other people to help us obtain the outcomes we

are trying to achieve. Trust is an essential component of successful team collaboration and is

necessary for individuals who are considering interacting in some form of cooperation with

another (Porras, Collins, & Collins, 2004). Trust is an essential element, because whenever

individuals join with others in a formal or informal setting or work group, in order to function

effectively as a group, it will generally require interdependence among all those involved.

Leaders need to develop a strong foundation of credibility in order to gain the trust of the

employees. Credibility makes a difference and goes far beyond employee attitudes by

influencing customer, investor, and employee loyalty. Credibility is the foundation of

leadership. If leaders espouse one set of values but personally practice another, people find them

to be duplicitous. Likewise, if leaders practice what they preach, people are more willing to

entrust them with their livelihood and even their lives (Kouzes & Posner, 2007). This study

proposed that employees who trust their leaders would be more willing to become involved,

supportive, and committed to the organizations goals and values. This willingness to go beyond

one's work role with no direct reward is an aspect of one's organizational citizenship behavior

(Organ & Ryan, 1995).

Establishing Trust

There has been a lot of recent academic interest in the role of trust in organizations. Most

studies have focused on personal sources in the domain of dyads (Colquit, Scott, & LePine,

2007; Dirks & Ferrin, 2002). Scholars seem to agree that personal and institutional antecedents to trust are critical. Li, Bai, and Xi (2012) added to the body of knowledge by studying "the three most critical contextual antecedents, that is, leadership role, structural role, and cultural norm at the organizational level, on organizational trust directly" (Li et al., 2012, p. 371).

Unfortunately, the research methods used to measure trust have been rudimentary and highly fragmented. In the past 50 years of research, over 129 different measures of trust have been used, many of which were not validated or replicated (McEvily & Tortoriello, 2011). Additionally, much of the research has not adequately differentiated the characteristics of the leader from those of the organization, or between an individual's trust in the leader and from that of the organization.

Comment on antecedents: The research data support the conclusion that leadership and organizational antecedents work together to create trust. Although this dissertation distinguishes between the organizational antecedents and the leadership antecedents to trust, this is done for clarity purposes only. For example, it is possible that an employee may trust a leader so completely, that even knowing nothing about the organization, the employee may decide to trust. Likewise, it is also theoretically possible for an employee to entirely trust an organization to the point that the employee would trust the organization's leaders.

The premise of this dissertation was that organizational and leadership antecedents work together to provide the trustor with enough reason to pass through the *trust-belief threshold* and begin performing trusting behaviors. As previously discussed, there are antecedents that must be met to overcome the resistance to trust that has been previously identified as the *trust-belief threshold*. Once this point has been reached, an affective state of mind is achieved by the employee. This state of mind persuades the employee that it is safe and beneficial to perform

trustworthy behaviors. The trustworthy behaviors are then shown to create individual and organizational performance. The success of the individual and the organization reinforces the positive behaviors and leads to even greater trust and trust-induced behaviors.

There are both organizational and leadership antecedents to trust. They are often intertwined to the point that they are indistinguishable from each other, but taken together, they provide the reasons that, and the basis for, an employee to trust in the organization. This feeling of trust is believed to form the basis from which the employee will engage in extra-role behaviors that will eventually lead to organizational performance. The relationships between the antecedents of trust, the propensity to trust, trustworthy behaviors, and their effect on both individual and organizational performance have been thoroughly researched and modeled in the research studies that have been discussed in this dissertation.

Comment on relationships: Although all of the relationships in the organizational trust system model are supported by the research cited in this paper, this is a simplified illustration that depicts the general system of creating organizational trust. Due to the diverse nature of the studies as reported earlier (e.g. different cultures, definitions of trust, lack of validated research questions, etc.), this model is intended as an aid in understanding the antecedents and consequences of organizational trust as detailed in this dissertation.

As a means of providing clarity to this dissertation, an Organizational Trust System model a conceptualized systems diagram model is shown in Figure 7 to provide an overview and summary of the research findings for the creation and sustainment of organizational trust.
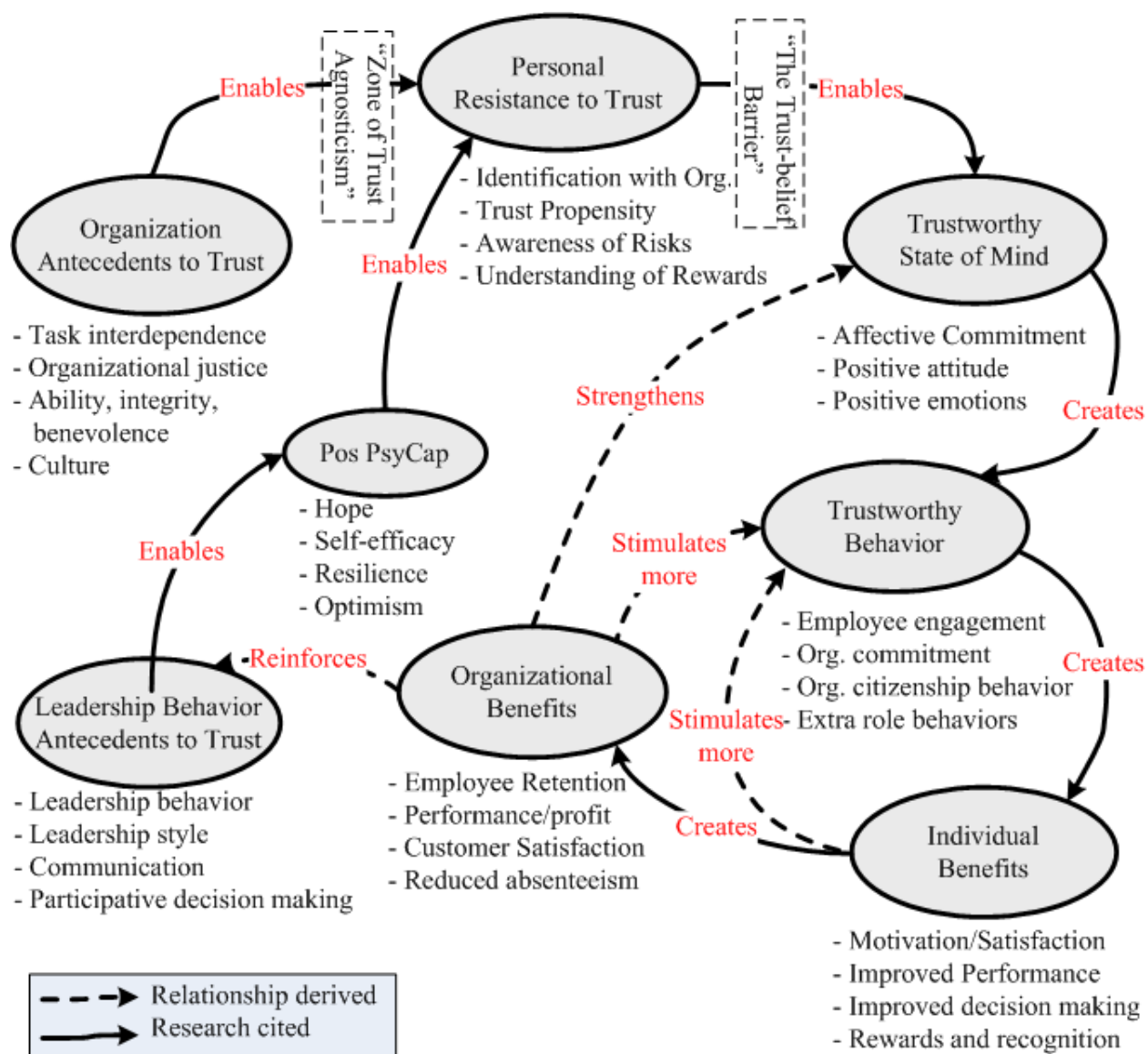
Figure 7. Organizational trust system model.

The Organizational Trust Systems Model

To help conceptualize the researcher's belief, one can imagine an employee in the top center of the systems model diagram in the *personal resistance to trust* phase. In this state the individual is in an agnostic state where he does not trust or distrust his leader. Once the individual has seen or been exposed to enough of the leadership and organizational antecedents to overcome his inherent resistance to trust, he will achieve the *trustworthy state of mind* phase.

Having this state of mind will enable him to undertake trustworthy behaviors that will result in both personal and organizational benefits. As illustrated by the dashed lines in the systems model, the researcher believes that once trust has been enabled, the benefits and associated behaviors create even higher trust levels. The positive results that have been achieved from these trustworthy behaviors will reinforce the employees' belief in the antecedents of trust and will form even higher levels of trust and performance. Each of these relationships and the research that led to these conclusions are described in more detail in the remainder of this chapter.

Antecedents to Trust

Mayer et al. (1995) proposed the characteristics of *ability*, *benevolence*, and *integrity* as antecedents to trust. Mishra's (1996) model for organizational trust identified the four distinct dimensions of trust as competence, openness, concern, and reliability. Mishra's model encapsulated the antecedents of the Mayer et al. (1995) model and expanded the antecedents of organizational trust to include the concept of associability (Leana & VanBuren, 1999) and identification (Shockley-Zalabak, et al., 2000).

Ability. A leader's *ability* is a group of competencies and capabilities that enable the leader to have influence within some specific domain (Mayer, et al*.,* 1995). Other researchers have used synonyms such as competence, perceived expertise, and expertness to describe the same concept. At the organization level, competence deals with the perception that an organization is effective. It refers to the amount of confidence that an employee has in the competence of their organization's leadership.

Benevolence. According to Mayer et al. (1995), *benevolence* "is the extent to which a trustee wants to do good to the trustor" (p. 718). Other researchers *have* used the synonyms altruism, loyalty, intentions, and motives to convey the same concept as benevolence. An

example of this is when a mentor wants to help the protégé, even though he is not required to be helpful and there is no extrinsic reward (Mayer et al*., 1995)*.

Integrity. *Integrity* is the perception of the set of principles that the trustee finds acceptable and adheres to. Some researchers used similar concepts to represent what Mayer et al. (1995) conceptualized as integrity. Some of these were value congruence, consistency, fairness, or character. Openness, the second dimension in Mishra's (1996) model, is closely associated with integrity, as it relates to the amount of openness and honesty an employee associates with the organization. Employees are most likely to trust in their leaders. Mishra's four antecedents appear most often in the literature as organizational antecedents to trust (Dietz & Den Hartog, 2006). Mishra added predictability (or reliability) as antecedents to trust. This dimension deals with the expectation for consistent and dependable behavior. Scholars have seen the congruence between what organizational leaders do, and what they ask their employees to do as having an immense impact on organizational trust (Kouzes & Posner, 2007; Nanus, 1989; Shockley-Zalabak, & Morley, 1989). A summary is provided as Table 1 that summarizes the references to the organizational antecedents to trust.

Table 1

References to Organization Antecedents to Trust

Reference	Ability, Benevolence, and Integrity	Procedural Justice, fairness	Culture, Power distance	Structure, task dependence	Culture, climate
	Organization Antecedents				
Alston & Tippett (2009)				x	
Aryee, et al., (2002)		x			
Avolio et al., (2004)	x				
Beccerra & Gupta (1999)	x			x	
Chughtai & Buckley (2008)	x				
Connell, J., et al., (2003)		x			
Costigan, et al., (2006)			x		
Cropanzano, et al., (2007)		x			
De Jong, et al., (2007)			x	x	
Dietz & Hartog (2006)	x			x	
Ferris, et al., (1973)			x		x
Folger & Konovsky (1989)		x			
Gagné & Deci (2005)				x	x
Gardner, et al., (2005)	x				x
Gellatly & Withey (2012)				x	x
Li, et al., (2012)	x		x	x	x
Luthans, et al., (2008)					x
Malinen et al., (2013)		x			
Mathieu & Zajac (1990)				x	x
Mayer, et al., (1995, 2005)	x			x	
Mishra, (1996)	x		x		
Nir, et al., (2012)					x
Organ & Ryan, (1995)		x			
Parker, et al., (2006)				x	x
Perry & Mankin (2007)	x	x			
Ruppel & Harrington (2000)	x	x			
Saks (2006)		x			
Shockley-Zalabak, et al., (2010)	x		x		x
Smith, et al., (1983)				x	x
Stinglhamber, et al., (2006)		x			
Suliman & Iles (2000)				x	x
Zolin, et al., (2004)					x

Organizational Antecedents

Organizational trust is viewed as a multi-level phenomenon that is closely related to

norms, values, and belief in organization culture (Shockley-Zalabak, & Morley, 1989). Studies

suggest that a culture can be created that will exhibit the organization's values, priorities, and

vision (Fairholm, 1994). Research has shown that elements of an organization's culture are a

key to commitment, productivity, and profitability (Alston & Tippett, 2009). An organization's

culture will dictate the behaviors of the employees. Schein (2004) says that the cultural

assessment process needs to understand the strengths and weaknesses of the organization

because it is much easier to draw on the strengths of the culture than to overcome the

weaknesses. According to Schein (2004), "the function of cognitive structures such as concepts,

beliefs, attitudes, values, and assumptions… that develop over time in groups and organizations

serves as a stabilizing and meaning providing function" (p. 320).

The research on trust in various cultures has been limited. The foundational research on

the study of trust was primarily conducted in the Unites States, whereas much of the recent

research on trust has been done on other countries. The cultural dimensions of power distance

and individualism-collectivism vary significantly between countries as they apply to the

employee's trust of the supervisor (Earley, 1986).

Power distance. Power distance refers to the extent to which a society accepts status

privileges and tolerates power differences (Carl, Gupta, & Javidan, 2004). The amount of

employee trust may vary depending on the kind of power distance the culture endorses. In high

power distance cultures, people do not question the decisions of the leaders. The employees

expect to have their jobs and responsibilities dictated to them and do not question authority

because they fear the consequences. This is contrasted against the low power distance cultures

that have looser, more decentralized hierarchies. These low power cultures have leaders who are more willing to trust subordinates with important jobs (Costigan et al., 2006; Lawal & Oguntuashe, 2012). Low power distance countries like the United Kingdom and the United States which have power distance scores of 35 and 40 respectively will be expected to have different organizational trust data than those from high power distance countries, like Mexico or Saudi Arabia, which have high power index scores of 80.

The other cultural dimension, in-group collectivism, refers to the extent to which employees have pride and loyalty in the organization in which they work. This adds an element of uncertainty in the data because the results of the research may not be consistent across cultures (Fink & Kessler, 2010; More & Tzafrir, 2009; Rahim, Magner, Antonioni, & Rahman, 2001). For example, research has shown that affect-based trust and enterprising behavior was stronger in the three collectivist countries of Turkey, Poland, and Russia, than it was in the United States (Costigan et al., 2006).

Organizational justice. Trust is a critical element in the social exchange relationship. Employees appraise the fairness of the organizations or organizational justice as an antecedent to trust. Social exchange in a work setting may be initiated by employees' perception of fairness or organizational justice that is perceived by the employees. According to Blau (1964), "social exchange requires trusting others to reciprocate" (p. 98). There has been a lot of research that has examined the relationship between an organization's fair treatment of its employees and trust (Colquit, Conlon, Wesson, Porter, & Ng, 2001; Stinglhamber, De Cremer, & Mercken, 2006). According to social exchange theory, when both parties abide by exchange rules, the result will be a more trusting and loyal relationship and mutual commitments (Cropanzano & Mitchell, 2005).

There are three different aspects of fairness that have been shown to have an effect on organizational trust (Colquitt et al., 2001). The justice of outcomes (*distributive justice*), the justice of formal allocations (*procedural justice*), and the justice of interpersonal transactions they encounter with others (*interactional justice*) all play a role in the evaluation of trustworthiness (Cropanzano, Bowen, & Gilliland, 2007; Stinglhamber, et al*.,* 2006). *Distributive justice* pertains to an employee's perception of the fairness in the distribution of the resources as they relate to their allocations or outcomes. Individuals are concerned that they get their fair share. Sometimes, things are distributed justly, as when the most qualified person gets promoted. Other times, the advancement may go to a less qualified person due to a political relationship with upper management (Cropanzano et al*.,* 2007; Moorman, 1991). *Procedural justice* is the idea of fairness in the processes by which outcomes or resources are allocated. A just process is one that is applied consistently to all. If the process is perceived as being just, employees show greater loyalty and more willingness to behave in the organizations best interest (Cropanzano, et al*.,* 2007; Moorman, 1991). *Interactional justice* is degree to which the people affected by decision are treated by dignity and respect. There are two components to this type of justice. The first part pertains to whether one is truthful and provides adequate justifications when things go badly. The second part refers to the amount of respect and dignity used in the communications (Cropanzano, et al*.,* 2007). Procedural justice and trust in senior management has been shown to predict organizational engagement (Malinen, Wright, & Cammock, 2013).

Ethics. One way to build (or destroy) trust is through the perception of ethical (or unethical) behavior by leaders. Kouzes and Posner (2007) stated that, "at the heart of collaboration is trust…. without trust you cannot lead, and without trust you cannot get extraordinary things done" (p. 224). Organizational leaders are well-aware that high-trust

organizations have employees that are better at innovation and problem solving (Kouzes & Posner, 2007; Zand, 1972). It is in the organization's best interest to capitalize on the benefits of this behavior in order to compete more successfully in the global marketplace. The presence of a high degree of trust among the employees is important because it helps facilitate the transformation of strategic goals and vision into reality (Kouzes & Posner, 2007).

According to Shockley-Zalabak et al. (2010), action, behavior, and communication together build trust in competence. "Core competence is fundamental and is the most important strategy on which to build trust in competence" (p. 64). Organizations need to continually examine how their vision is supported by the organizations core values, leadership, goals, strategy, and structure (Shockley-Zalabak et al., 2010).

Vision. Senge (2006) says that building a shared vision is a way of articulating the governing principles of the organization. He contends that the vision should answer the three questions of what, how, and why. The vision is actually *what* the organization will become. The *why* is the organizations sense of purpose, and the *how* is the definition of the organization core values (Senge, 2006). The organization's vision must clearly define the destiny of the organization.

The vision was created to serve a type of guide as to how the organization will conduct itself, how customers will be served, how employees will be treated, how the organization will carry out its social or environmental responsibilities, and how the company will be structured. The vision ultimately reflects the reason for the formation of the organization. Senge (2006) asserts that "visions spread because of a reinforcing process of increasing clarity, enthusiasm, communication, and commitment" (p. 211).

Task dependence. De Jong, Van der Vegt and Molleman (2007) added one additional organizational antecedent to trust by concluding that task interdependence is a key characteristic of trust development. This basis of task interdependence is the concept that there needs to be a reason to trust another before trusting behavior can take place (De Jong et al., 2007). This coincides with the contention that the development of trust requires opportunities to interact and exchange information (Gibson & Manuel, 2003).

Leadership Antecedents

An employee's perception that leaders have trust-promoting attributes may influence leader effectiveness (Bass, 1990; Hogan, Curphy, & Hogan, 1994). Trust in leadership has been recognized as important in empirical articles and by researchers for over five decades (e.g., Argyris, 1962, Likert, 1967; McGregor, 1967; Mellinger, 1959; Read, 1962). Since that time, the amount of trust that individuals have in their leaders has emerged as a key concept in several leadership theories. For instance, leaders building trust in their followers is a key aspect of both transformational and charismatic leadership theories (Kirkpatrick & Locke, 1996; Podsakoff, MacKenzie, Moorman, & Fetter, 1990) and an element in the leader-exchange theory (Schriesheim et al., 1999). One positive leadership attribute used by leaders is to demonstrate vulnerability and exhibit risk by sharing responsibility with their employees and involving them in the decision making process.

Decision making. Trust is theorized by Gamson (1968) to predict both individual acceptance of the decision making system and the means used to influence decision makers. Ritchie (1974) summarized several conditions that moderate the effects of participation. Some of these are: when individuals have relevant skills and information, believe that their participation is legitimate, and when they believe that their involvement will affect the outcome.

Trust in organizational decision making has been shown to be a predictor of satisfaction attitudes (Driscoll, 1978; Goris et al., 2003). Increased levels of participation in the decision making process has been associated with overall satisfaction in the organization as well as with specific satisfaction with participation itself (Driscoll, 1978). Additionally, developing trust between managers and subordinates will lead to improved relationships and to employees that are more willing to participate in the decision-making process (Rosen & Jerdee, 1977; Shen & Chen, 2007).

  Leadership communication. Trust has been shown to increase the efficiency and effectiveness of communication (Blomqvist, 2002). Trust in coworkers facilitates openness in communication and an improved perception of the accuracy of information (Benton, Gelber, Kelley, & Liebling, 1969). Leaders who freely exchange thoughts and ideas with their employees enhance trust (Shockley-Zalabak et al., 2010). Communication plays a central role in developing and maintaining trust. The quality of information and quantity of information are the two primary aspects of information sharing that are commonly discussed in the literature. The quality of information is generally discussed in terms of accuracy, timeliness, and usefulness. Research has shown that quality of information is associated with higher levels of trust (Benton et al., 1969; Folger & Konovsky, 1989; Thomas, Zolin, & Hartman, 2009). Thomas et al. (2009) found that the quality of information predicted trust in one's coworkers and supervisors while the adequacy of information predicted one's trust in top management. The quantity of information relates to whether the organization members feel adequately informed. Research has shown that there is a strong relationship between the flow of information and trust (Beccerra & Gupta, 2009; Thomas et al., 2009). Open communication is a key factor related to interpersonal trust (Butler, 1991; Farris, Senner, & Butterfield, 1973; Thomas et al., 2009). Open communication is

demonstrated when employees are willing to voice their thoughts and ideas even if their ideas go against the popular opinion (Thomas et al*.,* 2009).

The words used to communicate are important, but according to Covey and Merrill (2006) "sometimes words do not communicate at all. Research shows that face-to-face communication regarding attitudes and feelings is seven percent of what people say, 38 percent of how they say it, and 55 percent body language" (p. 212). The behaviors of leadership in high-trust organizations must be consistent with the behaviors that it professes. The leaders must *walk the talk* when they interact with others so that they can avoid eroding the trust that others have in them (Covey & Merrill, 2006, Kotter, 1995, Shockley-Zalabak et al*.,* 2010). Managers that are unable to trust others cannot be effective; they either supervise the work of others too closely or they end up doing most of the work themselves. Employees listen to and accept guidance from leaders that they trust. A trusting relationship with leadership will also improve an employee's ability to innovate (Kouzes & Posner, 2007).

Behaviors of high-trust leaders. Trustor characteristics are the process used by an individual or an organization when demonstrating acts of trustworthy behavior. Some of the characteristics associated with trustor behavior include expectations or belief and vulnerability. This is especially important when perceiving another person's intentions or behavior (Lewicki & Bunker, 1996; Lewicki et al*.,* 1998), resulting in a feeling of defenselessness when trust is violated. According to Covey and Merrill (2006), trust can no longer be viewed as something you either have or do not have. It is something you must create within your organization in order to increase the organization's performance. These types of behaviors were characterized into *character behaviors*, *competence behaviors*, and a combination of both *character and competence behaviors*. The behaviors associated with *character* are explained as:

- *Talk straight:* Leaders need to tell the truth and be honest. Using simple language, they need to demonstrate integrity by never trying to manipulate others by spinning the truth or distorting facts.

- *Demonstrate respect:* Everyone must be treated with kindness and respect, especially those who cannot do anything for the leader. Leaders should never fake caring and never attempt to be too efficient with people.

- *Create transparency:* Being open and authentic in a way that employees can verify is important. Others need to see you as you are and perceive that you have no hidden agendas. This is done by erring on the side of disclosure and not hiding information.

- *Right wrongs:* When mistakes are made, it is critical that leaders make amends quickly. They need to apologize quickly and make restitution where possible. They need to demonstrate personal humility by not covering things up or letting personal pride get in the way of doing the right thing.

- *Show loyalty:* Giving credit to others and speaking up for others who are not there to speak for themselves will help demonstrate loyalty. Leaders need to speak about people as if they were present, never speak negatively about others behind their backs, and never disclose other's private information (Covey & Merrill, 2006).

The behaviors associated with *competence* are explained as:

- *Deliver results:* Leaders need to establish a track record of results. They do this by accomplishing what they are hired to do and being on time and within budget. They need to be persistent and make things happen. This is done by not overpromising and being unable to deliver or by making excuses for not delivering.

- *Get better:* When leading others, it is important to be a constant learner. Leaders must continuously increase their capabilities by developing feedback systems, both formal and informal, and then acting on the feedback they receive. By not considering themselves above feedback or assuming their current knowledge and skills will be sufficient for tomorrow's challenges, they will be more open to learning.

- *Confront reality:* Leaders need to be courageous. By taking issues head on and addressing the tough stuff directly, they acknowledge the reality of the situation. They need to lead without being threatening and not skirt the real issues because they are difficult or uncomfortable to address.

- *Clarify expectations:* Employees need to understand what is expected of them. Leaders need to disclose and reveal their expectations. By discussing them and renegotiating them if needed, it validates them. Good leaders do not assume that expectations are clear or shared without this discussion.

- *Practice accountability:* Take responsibility for results by holding yourself and others accountable. Clearly communicating how you and how others are doing will help demonstrate this. Good leaders do not avoid or shirk responsibility, blame others, or point fingers when things go wrong (Covey & Merrill, 2006).

Covey and Merrill (2006) associated some leadership behaviors' with both *character* and *competence.* They are:

- *Listen first:* Leaders need to listen, understand, diagnose, and then speak. Leaders should not assume they know what matters most to others or presume to have all the answers or all the questions. By listening with their ears, eyes, and heart, they will discover the most important behaviors to the people with whom they work.

- *Keep commitments:* Say what you are going to do, and then do what you say you are going to do. Be careful to make commitments carefully and keep them at all costs. Keeping commitments demonstrates reliability and concern for others. If commitments cannot be kept, acknowledge this as soon as possible and never make excuses or break confidences to get out of a commitment you have broken.

- *Extend trust:* Demonstrate a propensity to trust. Extend trust abundantly to those who have earned it and conditionally to those who are earning it. Do not withhold trust because there is risk involved, but extend trust to others based on the situation, risk, and character/competence of the individuals' involved (Covey & Merrill, 2006).

Leadership Styles

Transformational leadership. An employee's perception of trust in leadership is important for leader effectiveness (Bass, 1990; Hogan et al., 1994). Transformational and charismatic leaders build trust in their followers (Kirkpatrick & Locke, 1996; Podsakoff et al., 1990; Dirks & Ferrin, 2002). According to Bass (1990),

transformational leadership occurs when leaders broaden and elevate interests of their employees, when they generate awareness and acceptance of the purposes and mission of the group, and when they stir their employees to look beyond their own self-interest for the good of the group. (p. 21)

The primary characteristics of a transformational leader are charisma, inspiration, intellectual stimulators, and individual consideration. These characteristics are far different than those used by transactional leaders, who use contingent rewards, watch and search for deviations of the rules, intervene only when standards are not met, and avoid making decisions (Bass, 1990). Transformational leaders engage in actions that gain the trust of their followers and that

in turn results in favorable outcomes (Podsakoff, et al*.,* 1990). They build trust by demonstrating

individual concern and respect for their followers (Jung & Avolio, 2000) and are more concerned

with character-based issues. They put less emphasis on the relationship and more emphasis on

ensuring that they are perceived as being fair and having high integrity (Dirks & Ferrin, 2002).

Authentic leadership. Authentic leadership has emerged as a central component of

leadership studies since its conceptualization in the late 1970s (Clapp-Smith, Vogelgesang, &

Avey, 2009). Among leadership scholars, there is no single accepted definition of authentic

leadership, but rather there are multiple definitions, each written from a different viewpoint

(Chan, Hanna, & Gardner, 2005). These viewpoints can be categorized as: intrapersonal,

developmental, and interpersonal. The intrapersonal perspective focuses closely on the leader

and what goes on within the leader (Northouse, 2010). Shamir and Eilam (2005) present an

example of the intrapersonal approach by defining authentic leaders based on their self-concepts

and how these self-concepts are related to their actions. They suggested that authentic leaders

exhibit genuine leadership, lead from conviction, and are originals, not copies.

From a *developmental* perspective, authentic leadership is viewed as something that can

be nurtured in a leader rather than it being a fixed trait. Walumbwa, Avolio, Gardner, Wernsing,

and Peterson (2008) conceptualized this as behavior that is grounded in the leader's

psychological qualities and strong ethics. The proposed that these qualities are composed of the

four distinct components of self-awareness, internalized moral perspective, balanced processing,

and relational transparency (Avoli, Gardner, Walumbwa, Luthans, & May, 2004). The third way

of defining authentic leadership is from an *interpersonal* perspective. This perspective

emphasizes authentic leadership is created by the relationship between leaders and followers

together (Eagly, 2005). It is not a result created by the leader's efforts alone, but authenticity emerges from the reciprocal interaction between leaders and followers and vice-versa.

There are four key positive psychological attributes that have an impact on authentic leadership. They are *confidence, hope, optimism*, and *resilience*. *Confidence* refers to having self-efficacy and can be defined as a person's belief in his ability to achieve a specific goal in a specific situation. Leaders who have confidence welcome challenges, are more motivated to succeed, and are more persistent when obstacles arise (Bandura, 1997; Luthans & Avolio, 2003). *Hope* is defined as a positive motivational state that is based on willpower and goal planning (Luthans & Avolio, 2003). Authentic leaders with hope have goals that they know can be accomplished. Their hope inspires trust and belief from their followers. *Optimism* refers to a leader's cognitive process of having favorable expectations about the future. They are positive about their capabilities and the outcomes they can achieve. When individuals experience instances of optimism, they tend to internalize personal events and externalize negative events, resulting in more positive expectancies of outcomes (Seligman & Schulman, 1986). *Resiliency* is ability to recuperate from stress, conflict, failure, change, or increase in responsibility. Resilient leaders are able to bounce back from challenging situations and feel strengthened after responding to difficult or adverse situations (Luthans, 2002).

Human capital. Human capital is generally equated to a person's knowledge, skills, abilities, or competencies that come from experience, education, and specific identifiable skills (Luthans & Youssef, 2004). This human capital is a capability that organizations have, but that capability needs to be transferred into action in order for organization to reap the benefits of their employees' competencies. Positive psychology is concerned with what is right with people, and building on that, instead of trying to fix what is wrong with people. A positive psychology

approach, aimed at actualizing this human potential is called *Positive Psychological Capital* (PsyCap), and has recently received a lot of attention in the literature.

Positive psychological capital. Considerable research has examined the negative behaviors of employees. Emerging research in PsyCap by Luthans, Avolio, Avey, and Norman (2007), suggest there is value in management scholars pursuing positive deviance as well, because positive deviance is largely unexplored. PsyCap is defined as a positive state of development characterized by self-efficacy, hope, resilience, and optimism (Luthans et al.*,* 2007). The constituents of PsyCap are equivalent to the four psychological attributes of authentic leadership previously discussed. Research has shown that there is a direct positive relationship between leaders' authenticity, PsyCap, and subordinates' trust and performance (Zamahani, Ghorbani, & Rezaei, 2011). Luthans and Avolio (2003) have suggested that a leader's authenticity is represented by their positive psychological capital, whereas Gardner and colleagues maintain that authentic behaviors by leaders lead to trust (Gardner, Avolio, Luthans, May, & Walumbwa, 2005). A summary is provided as Table 2 that summarizes the leadership antecedents to trust.

Table 2

References to Leadership Antecedents to Trust

Reference	Leadership Antecedents				Leadership Styles		
	Participative & decentralized decision making	Communication (openness)	Leader experience, character, competence, expertise	Predictability, reliability	Leadership behavior and style	Supportive supervision and organization	Hope, self efficacy, resilience, optimism
Avey, et al., (2008)							x
Avolio, et al., (2004)							x
Beccerra & Gupta, (1999)		x		x			
Benton, et al., (1969)		x					
Butler, J. K., Jr. (1991)			x	x			
Chughtai & Buckley (2008)		x	x				
Clapp-Smith et al., (2009)						x	x
Covey & Merrill (2006)		x	x				
Dietz & Den Hartog (2006)		x	x				
Ellonen, et al., (2008)			x				
Ferris, et al., (1973)	x						
Gardner, et al., (2005)					x		
Lawal & Oguntuashe (2012)			x		x		
Li, et al., (2012)		x					
Luthans et al., (2003, 2007)		x					x
Mathieu & Zajac (1990)		x					
Mayer, et al., (1995, 2005)		x	x				
Mishra (1996)	x	x	x				
Mishra & Morrissey (1990)	x	x			x		
Organ & Ryan (1995)			x			x	
Parker, et al., (2006)						x	
Robertson, et al., (2012)				x			
Ruppel & Harrington (2000)		x	x				
Saks (2006)						x	
Shockley-Zalabak, et al., (1989, 2010)		x	x	x			
Zamahani, et al., (2011)						x	x

The Trust-Belief Threshold

Rotter (1967) contends that individuals differ in their propensity to trust others. Some of the factors that affect an employee's propensity to trust others are based on their life experiences, personality type, cultural background, and education (Mayer et al., 1995). Trust is a psychological state comprising the intentions to accept vulnerability based on positive expectations of the actions of the trustee (Rousseau, Sitkin, Burt, & Camerer, 1998). People with a low propensity to trust see others as self-centered, conniving, and potentially dangerous, whereas individuals with a high propensity to trust believe that most people are sincere, fair, and have good intentions (Mooradian, Renzl, & Matzler, 2006). The literature supports the belief that an individual will trust another person or organization once a minimum set of criteria has been met. These criteria are the antecedents to trust that have been previously discussed and the individual's internal predisposition to trust. Each individual's propensity to trust will vary depending on many factors, which include the length of the relationship (Kramer, 1999; Lewicki & Bunker, 1996), the culture of the individuals (Aycan et al., 2001; Costigan et al., 2006; Lawal & Oguntuashe, 2012), the amount of experience (Mayer & Argyres, 2004; Vanneste & Puranam, 2010), the awareness of risks and rewards (Gagné & Deci, 2005; Pinder, 1984), the identification with the organization (Shockley-Zalabak et al., 2000), and the degree of affective commitment (Gellatly & Withey, 2012; Tan & Lim, 2009). The end result of these individual attributes needs to be a psychological state that motivates the individual enough to overcome the resistance to trust to put them in a trustworthy state of mind. This inclination to trust, or not to trust, can be partially explained by the expectancy theory.

In the expectancy theory, Vroom (1964) contends that employees consciously choose a particular course of action based on their perception, attitudes, and beliefs. The expectancy

theory is founded on the tenants of expectancy, instrumentality, and valence. Expectancy is the degree in which effort is perceived to lead to performance, instrumentality is the perceived relationship between performance and rewards, and valence deals with the concept that an employee's motivation is dependent on how much he wants a reward. Porter and Lawler (1968) later developed a theoretical model that postulates that the amount of effort an employee expends will determine the expectations, in conjunction with the value, placed on the outcome in the person's mind (Pinder, 1984). Research has shown that intrinsic motivation (based in interest) and autonomous extrinsic motivation (based in importance) are both related to performance, satisfaction, trust, and well-being in the workplace (Gagné & Deci, 2005).

As previously described, a degree of risk or ambiguity must be present for the *need to trust* to exist. Mishra (1996) tied *characteristics, belief*, and *vulnerability* into his definition of trust as "one party's willingness to be vulnerable to another party, based on the belief that the latter party is competent, open, concerned, and reliable" (p. 280). In addition to the potential rewards associated with the behavior being considered, the employee must evaluate the risks before deciding on whether or not to trust the leader or organization. When the risks are low and the reward is high, the trustor will be more likely to trust (Zolin, Hinds, Fruchter, & Levitt, 2004). The evaluation of the risks and rewards is shown as an impediment to overcome in the organizational trust system model as shown in Figure 7. Shockley-Zalabak et al. (2000) added *identification* as an antecedent to trust. This concept is a belief that if individuals identify with the organization's goals, norms, values, and beliefs, they are likely to have higher trust levels (Shockley-Zalabak et al., 2000). In contrast, when employees feel more alienated from the organization, they have lower organizational trust levels and effectiveness (Leana & Van Buren,

1999; Morley & Shockley-Zalabak, 1991). In this model, it would be more appropriate to call it a barrier to trust that must be overcome rather than an antecedent.

Identification. *Identification* describes the concept that if individuals *identify* with the organization's goals, norms, values, and beliefs, they are likely to have higher trust levels (Shockley-Zalabak et al*., 2000). Trust in senior management originates from a foundation of structured relations, roles, and rules within an organization (Chughtai & Buckley, 2008) and is associated with organization-wide systems (McCauley & Kuhnert, 1992).

Once a sufficient level of the antecedents to trust have been perceived by the trustor to overcome the individual's propensity to trust, the trustor will then be in a *trustworthy state of mind*. This tipping point s referred to as the *trust-belief threshold* shown in the *organizational trust system model*. After this point, there is no longer *distrust* or *trust antagonism*, but rather the beginning of *knowledge-based trust*. The literature refers to this trustworthy state of mind as an emotional state where employees have a positive attitude, affective commitment, and positive emotions (Avey, Wernsing, & Luthans, 2008). A summary is provided in Table 3 that summarizes the references of the requirements to achieve sufficient trust to cross through the trust-belief threshold and achieve a trustworthy state of mind.

Table 3

References Creating a Trustworthy State of Mind

Reference	Resistance to trust				Trustworthy state of mind		
	Identification with the organization	Trust propensity, individual personality	Awareness of risks	Understanding rewards, benefits	Positive attitude	Affective commitment	Positive emotions, optimism, accept vulnerability
Aryee, et al., (2002)					x		
Avey, et al., (2008)					x		x
Avolio et al., (2004)	x						x
Beccerra & Gupta, (1999)				x			
Chughtai & Buckley (2008)		x			x		
Colquitt, et al., (2007)			x			x	x
Dietz & Den Hartog (2006)		x	x		x		
Dirks & Ferrin (2002)					x		
Ellonen, et al., (2008)			x				
Folger & Konovsky (1989)					x		
Gagné & Deci (2005)						x	
Gellatly & Withey (2012)						x	
Luthans et al., (2004, 2008)						x	x
Mayer,et al., (1995, 2005)		x	x				
Meyer & Allen (1991)							x
Mishra & Morrissey (1990)	x						
Organ (1997)						x	
Organ & Ryan (1995)				x			
Parker, et al., (2006)						x	x
Pool & Pool (2007)				x			
Ruppel & Harrington (2000)		x					
Shockley-Zalabak, et al., (1989, 2010, 2011)		x					
Slovic (1993)			x	x			
Tan & Lim (2009)						x	
Zolin, et al., (2004)		x	x	x			

Once the employee has decided that the organization and its leaders are trustworthy, he will be in a *trustworthy state of mind* that will foster trustworthy behaviors. The literature discusses this *trustworthy state of mind* in several different ways. Some of the literature sometimes simply refers to an individual or organization as being trustworthy, but the emotional attachment between the employee and the organization is more aptly referred to as an *attitudinal commitment* (Costa, 2003), as a state of *affective commitment* (Meyer & Allen 1991; Tan & Lim, 2009), or a state of *positive emotions* (Keyes, 2010; Lyubomirsky, King, & Diener, 2005), because these descriptions infer that an emotional state is the basis of the decision to trust. Research on positive emotions has shown that when employees have three times as many positive emotions as negative emotions, this leads to high levels of functioning and well-being (Keyes, 2010). Additionally, research has shown that positive emotions are positively related to various measures of success and well-being (Lyubomirsky, et al., 2005) and can lead to better decision making (De Clercq, Dimov, & Thongpapanl, 2010), job attitudes, and organizational citizenship behavior (Organ & Ryan, 1995). The belief is that employees who have a positive attitude, and feel like an important part of the organization are likely to want to help the organization fulfill its vision. They will then begin performing *trustworthy* behaviors in an effort to do everything they can to help the leadership and the organization.

Meyer and Allen (1991) defined affective commitment as an individual employee's attachment, identification, and involvement with their organization. It is the psychological link between individual employees and the organization. Affective commitment has been shown to correlate positively with trustworthy behaviors and many positive work outcomes, such as job performance (Erdem & Ozen, 2003; Fink & Kessler, 2010; Goris et al., 2003; Suliman & Iles, 2000), organizational citizenship behavior (Meyer & Allen, 1997; Organ, 1997; Organ & Ryan,

1995; Podsakoff et al., 2009; Smith et al., 1983), and the employee's intention to remain in the organization (Mathieu & Zajac, 1990; Meyer, Stanley, Herscovitch, & Topolnysky, 2002). Affective commitment is conducive to greater longevity on the job and achievement of higher performance standards (Meyer & Allen, 1991).

Trustworthy Behaviors

Researchers have discussed these *extra-role* behaviors at the individual level, using terms such as proactive behavior (Parker, Williams, & Turner, 2006), self-starting (Campbell, 2000; Frese & Fay, 2001; Ibarra, 2003; Parker, 2000), employee engagement (Bates, 2004; Harter, Schmidt, & Hayes, 2002; Robinson, Perryman, & Hayday, 2004), proactive employee (Parker et al., 2006), and enterprising behavior (Becherer & Maurer, 1999). Researchers have also reported organizational level behaviors, using terms such as organizational citizenship behavior (Kannan-Narasimhan & Lawrence, 2012), organizational commitment (Cook & Wall, 1980; Pool & Pool, 2007; Saks, 2006), and organizational engagement (Chughtai & Buckley, 2008).

Organizational citizenship behavior. Organ (1988) had originally defined organizational citizenship behavior (OCB) as "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization" (p. 4). He later decided that it was not fruitful to regard OCB as extra role, beyond the job, or unrewarded by the formal system, as he previously proposed. So he modified this definition of OCB to be "performance that supports the social and psychological environment in which task performance takes place" (Organ, 1997, p. 95). OCB includes three critical aspects that are central to this construct. First, OCBs are discretionary behaviors performed by the employee as a result of personal choice, not because they are part of

the job description. Second, OCBs go above and beyond the normal expectations of the job description. Finally, OCBs have a beneficial effect on the overall organization.

Since Smith, Organ, and Near (1983) first coined the term OCB, over 650 articles have been published on OCBs and related constructs (Podsakoff et al., 2009). Since one of the main reasons for interest in OCBs is their relationship to performance, Podsakoff et al., (2009) performed a meta-analytic examination of the relationships between OCBs and their outcomes. They found, based on 168 samples composed of 51,235 individuals, that OCBs related to individual employee outcomes of performance, reward allocation decisions, and a reduction in withdraw related criteria (Podsakoff et al., 2009). Additionally, the same study of 3,611 units found that OCBs were related to organization outcomes, such as productivity, customer satisfaction, reduced costs, efficiency and unit-level turnover (Podsakoff et al., 2009).

Organizational commitment. Organizational commitment is the amount of psychological attachment an individual has to an organization. Leaders are interested in finding ways to improve how workers feel about their jobs so that these workers will become more committed to their organizations. The concept of organizational commitment has received a great deal of study as a consequence, as an antecedent, and as a work related variable (Mathieu & Zajac, 1990). Research has indicated that organizational commitment can predict the behaviors of absenteeism (Luthans et al., 2007; Gellatly, 1995; Mathieu & Zajac, 1990), turnover (Aryee et al., 2002; Connell et al., 2003; Hopkins & Weathington, 2006; Jaros, 1997; Podsakoff et al., 2009), job satisfaction (Hopkins & Weathington, 2006; Perry & Mankin, 2007; Pool & Pool, 2007; Robertson et al., 2012), and work motivation (Meyer, Becker, & Vandenberghe, 2004).

In their review of organizational commitment literature, Allen and Meyer (1990) identified three distinct, underlying themes to organizational commitment. These are the

employee's affective attachment to the organization, commitment as a perceived cost associated with leaving the organization, and commitment as an obligation to remain with the organization. Meyer and Allen (1991) argued that commitment is a multi-faceted construct where domains tend to be domain specific. They proposed a multidimensional model of organizational commitment scales consisting of affective, continuance, and normative commitment dimensions. Furthermore, they argued that one can achieve a fuller understanding of an employee's relationship with an organization when all three forms of commitment are considered together. They developed a three component conceptualization of commitment.

Affective commitment. An employee's emotional attachment to, identification with, and involvement in an organization is known as affective commitment. This form of commitment has its basis in the fact that employees are committed to the organization because they want to be. An individual is affectively committed to an organization when he or she feels personally responsible for the organizations success and fully embraces the organization's values and goals. This leads to high levels of performance, positive work attitudes, and a desire to remain in the organization (Allen & Meyer, 1990; Meyer, Paunonen, Gellatly, Goffin, & Jackson, 1989). Employees with strong affective commitment remain because they want to. They are predisposed to attend work regularly, perform tasks to the best of their ability, and take on extra roles to help out (Herscovitch & Meyer, 2002).

Continuance commitment. The form of commitment that develops when an employee perform duties based on the individual's awareness of the costs associated with leaving the organization is known as continuance commitment (Allen & Meyer, 1990). Continuance commitment refers to a rational aspect of commitment and concerns the needs of employees. The theory suggests that the longer that an employee remains with the organization, he will

accumulate investments that will be more costly to lose. Unlike affective commitment, it is a calculative or cognitive commitment based on a consideration of the costs and benefits associated with organizational membership, which is unrelated to affect (Meyer & Allen, 1991; Meyer et al., 1989).

Normative commitment. Finally, the third dimension of Allen and Meyers' (1990) model is normative commitment. In this dimension, the commitment reflects a feeling of obligation to continue employment. Employees are committed to an organization because they feel they ought to remain with it. The commitment develops through socialization experiences. These experiences emphasize that remaining loyal to the organization is the right thing to do. This belief is derived through benefits that the employee has received, such as, skills training or educational reimbursement, causing the employee to feel obligated to reciprocate or pay back the organization through continued service.

Since the three dimensions of commitment originate from different bases, an employee may experience differing degrees of each component of commitment. The components may interact in different ways and have been found to correlate differently with the antecedents to commitment (Allen & Meyer, 1990; Meyer, Allen, & Topolnytsky, 1998). Meyer and Allen (1991) suggested that using a three component model to study organizational commitment would provide a fuller understanding of an individual's psychological ties to the organization and developed the *Organizational Commitment Scales* to measure the amount of affective, normative, and continuance commitment an individual has to the organization (Meyer & Allen, 1991). These scales were used to develop the three component model (TCM) of commitment, which was further refined into the model that was used in this study (Meyer & Allen, 2004).

It is commonly believed that committed employees will work harder to achieve organizational objectives (Meyer & Allen, 2004), so organizations often try to foster commitment in their employees to achieve stability and reduce turnover. Employees who feel they are truly an integral part of the organization would most likely have a tendency to want the organization to be successful as a measure of their own success. This attitude is a powerful motivator to work hard to meet performance goals. A high level of organizational commitment is the result of an employee's willingness to contribute to the working culture as part of his or her belief in values and goals of the organization. It indicates that the employee trusts the leaders, is a willing partner in the values and culture of the organization, and desires to support the organization in order to achieve their common goals. This attitude and desire will motivate employees to take on *extra-role* behaviors.

Extra-Role Behaviors

The construct of extra-role behaviors is similar to organizational citizenship behavior. Extra-role behavior is defined as "behavior that attempts to benefit the organization and that goes beyond existing role expectations" (Organ et al., 2006, p. 33). While similar in most respects, extra role behaviors also include the behaviors of *whistle blowing* and *principled organizational dissent*. *Whistle blowing* is when an employee reports to authorities or leadership that another employee is committing unethical and or illegal practices, whereas *principled organizational dissent* is when employees speak up against the organization because they perceive some sort of injustice is being done (Organ et al., 2006). These employees believe that they are contributing to the good of the organization, even though it is not their responsibility to perform these roles. Another term used to describe positive employee behaviors is *employee engagement*.

Employee engagement. Employee engagement is a widely accepted and popular term

that has a basis in practice rather than theory (Robinson et al*., 2004). Most often, it is defined as

an emotional and intellectual commitment to the organization (Baumruk, 2004; Shaw &

Edwards, 2005) or the amount of discretionary effort exhibited by employees (Frank, Finnegan,

& Taylor, 2004). Employee engagement differs from organizational commitment in that

employee engagement is not an attitude, but rather it is the degree to which an employee is

attentive and absorbed in the performance of his job (Saks, 2006). In addition to the positive

proactive behaviors associated with trust, when a trustor is willing to be vulnerable to leaders and

colleagues, the trustor is free to focus full attention on job tasks as opposed to diverting energy to

monitoring and other counterproductive behaviors (Sackett & DeVore, 2001).

Counterproductive Behaviors

Counterproductive behaviors are any intentional behaviors by an employee that is viewed

as contrary to the organization's legitimate interests (Sackett, 2003). There are a wide range of

employee behaviors that can be considered counterproductive. Some are minor in nature, such

as a few instances of tardiness or absenteeism, and some are serious behaviors that constitute a

willful disregard for the organizations best interest, such as sabotage and theft. Whatever the

seriousness of the counterproductive behavior is, the amount and the severity of the

counterproductive behaviors will be lower when the employee trusts their leadership and the

organization. Trust facilitates a more effective exchange relationship between the trustor and

trustee (Blau, 1964), which encourages more beneficial, rather than counterproductive, behaviors

on the job. When an employee trusts their leaders, they are willing to be vulnerable to leaders

and colleagues and will be more likely to focus their full attention on job tasks as opposed to

diverting energy to monitoring. Thus, when employees trust their leadership and organization,

they will perform fewer and less severe counterproductive behaviors. In addition, low levels of trust have been linked to deviant work behavior (McAllister, 1995). As trust decreases, employees will be more likely to engage in counterproductive behaviors (Jensen & Raver, 2012; Lau et al., 2003; Sackett, 2003).

For this dissertation, it was not important to differentiate between the terms used to identify trustworthy employee behavior. Whether the research studied organizational commitment, organizational citizenship behavior, employee engagement, proactive behavior, or a specific behavior, it did not matter. The research showed that trust was the enabler of behaviors that go beyond the expected role of an employee in an organization. They are behaviors that would not have occurred if the employee did not have organizational trust. Once this trust has been established, employees would develop a commitment to the organization and begin to take on these extra-role behaviors that would benefit both the individual and the organization.

Proactive and Enterprising Behaviors

Research has shown that trust allows the development of a more effective exchange relationship between the trustor and trustee (Blau, 1964), which encourages more beneficial behaviors on the job which in turn leads to organizational performance. Organizations need employees to use their initiative and be self-starting (Campbell, 2000; Frese & Fay, 2001; Frohman, 1997; Parker, 2000). Employees who trust their leadership and the organization will perform more proactive behaviors (Ashford & Tsui, 1991; Kickul & Gundry, 2008; Parker et al., 2006; Simard & Marchand, 1995). Proactive behavior is "taking initiative in improving current circumstances; it involves challenging the status quo rather than passively adapting present conditions" (Parker, 2006, p. 636). Trust in coworkers has been shown to contribute to proactive

behavior (Parker et al., 2006). Proactive concepts have been researched at the individual level (Ashford & Tsui, 1991), the team level (Simard & Marchand, 1995), and at the organization level (Kickul & Gundry, 2008). Sometimes enterprising behavior is used as a synonym for proactive behaviors. Enterprising behavior is one of Campbell's (2000) five qualities of a proactive employee. This behavior is characterized by initiative, speaking out, independent judgment, active involvement, creativity, and risk taking. These proactive behaviors have been shown to lead to positive employee behaviors such as improved information sharing and knowledge transfer (Chowdhury, 2005; Dirks & Ferrin, 2002; Mayer et al., 1995; Levin & Cross, 2004; Mooradian et al., 2006; Nir, Ding, & Chou, 2012; Sankowska, 2012), risk taking (Colquitt et al., 2007), entrepreneurial behavior (Becherer & Maurer, 1999), enterprising behavior (Costigan et al., 2006), innovation (Carl et al., 2004; Ellonen et al., 2008; Sankowska, 2012; Tan & Tan, 2000; Wang & Ahmed, 2004) and the quality and quantity of decision making (Driscoll, 1978; Goris et al., 2003; Shen & Chen, 2007)

Risk taking and knowledge sharing. Knowledge sharing is also an important extra role behavior. Both affect and cognitive forms of trust have been shown to have a positive influence on knowledge sharing (Chowdhury, 2005; Levin & Cross, 2004; Mooradian et al., 2006; Nir, Ding, & Chou, 2012). The perceived trustworthiness of the source plays a significant part in knowledge transfer (Szulanski, Cappetta, & Jensen, 2004) as well as a positive effect on performance (Nir et al., 2012).

Trust is a basic requirement for collaboration both within and outside of organizations. With an effective sharing process, organizations can develop its knowledge base and competitiveness (McEvily & Tortoriello, 2011). Trust engenders knowledge creation, which is the process of generating knowledge from within the organization (Nir et al., 2012). A central

notion of trust is that it leads employees to engage in risk taking behaviors such as delegating and knowledge sharing and the acceptance of the vulnerability associated with them (Sankowska, 2012). Since, as previously discussed, trust mitigates the fear associated with risky enterprises there will be an increased acceptance of the uncertainty embodied with enterprising and innovative behavior.

Innovation. Knowledge transfer within the organization is an important antecedent to innovation. However, there also has to be a willingness to use the acquired knowledge to innovate (Sankowska, 2012). Without trust, it is difficult to lead effectively and make significant improvements. Innovation and innovativeness are critical to sustaining a competitive advantage, especially in mature organizations (Dougherty & Hardy, 1996). Trust in supervisor has been positively correlated with a subordinate's innovative behavior (Ruppel & Harrington, 2000; Tan & Tan, 2000). Organizational innovativeness can take on many forms. It can be administration or technical, incremental or radical, and it can be process or product related. An organization's ability to create such innovations has been recognized as one of the key determinants for it to survive and succeed (Wang, & Ahmed, 2004). Trust is a major factor in an organization's ability to innovate because trust is implicated in the innovation process. This is because idea implementation is based on an employee's expectation that his ideas will be taken seriously (Clegg, Unsworth, Epitropaki, & Parker, 2002). Researchers have shown that employees who perform trustworthy behaviors have organizational success, beneficial outcomes, and financial performance (Bates, 2004; Harter et al., 2002), are more likely to be satisfied with their job (Pool & Pool, 2007). A summary is provided as Table 4 that summarizes the references supporting the discussion and elements of trustworthy behavior.

Table 4

References Pertaining to Trustworthy Behavior

Reference	Trustworthy behavior				
	Organizational citizenship behavior	Organizational commitment	Extra role behaviors	Employee engagement, involvement	Cooperative, proactive & enterprising behavior
Avey, et al., (2008)		x			
Avolio, et al., (2004)			x	x	
Connell, et al., (2003)	x	x			
Costigan, et al., (2006)					x
Cropanzano, et al., (2007)	x	x			
Dietz & Den Hartog (2006)			x		
Dirks & Ferrin (2002)					x
Gellatly & Withey (2012)	x	x			
Harter, et al., (2002)				x	x
Herscovitch & Meyer (2002)		x		x	x
Kannan-Narasimhan & Lawrence (2012)	x	x			
Konovsky & Pugh (1994)	x	x			
Li, et al., (2012)			x		
Malinen, et al., (2013)		x		x	
Mayer & Gavin (2005)	x				
McAllister (1995)	x				x
Meyer & Allen (1991)		x			
Meyer, et al., (2004)	x	x			
Moorman (1991)	x		x		
Organ & Ryan (1995)	x	x			
Parker, et al., (2006)					x
Pool & Pool (2007)		x			
Ruppel & Harrington (2000)		x			
Saks (2006)	x	x		x	
Stinglhamber, et al., (2006)		x			
Tan & Lim (2009)		x			
Thomas, et al., (2009)				x	

Individual Benefits

Trust has been shown to predict attitudes (Costa, 2003), motivation (Dirks, 1999; Pool & Pool, 2007), and job satisfaction (Costa, 2003; Hopkins & Weathington, 2006; Perry & Mankin, 2007; Pool & Pool, 2007; Robertson et al., 2012; Shockley-Zalabak, et al., 2000). The literature uses terms such as attitude, emotional state, positive moods, affective commitment, and other terms to define what is being referred to as *a trustworthy state of mind.* This trustworthy state of mind has been shown to help decision making, because employees who are experiencing positive emotions are more likely to use heuristics, or rules of thumb, to help make decisions quickly. They possess enhanced problem solving skills and find better solutions to problems (Isen, 2001; Driscoll, 1978). Additionally, when employees believe that they can trust their coworkers, they will not waste time and effort with self-protection, but will instead focus their attentions and energy on improving performance (Mayer & Gavin, 2005).

Organizational Benefits

The importance of trust on organization performance has been well documented in the literature. This importance was summed up in *The Speed of Trust* (2006), by Kent Murdock, President and CEO of *O. C. Tanner Company*, as follows:

> If your workplace culture isn't open and honest, it won't create employee satisfaction, and you'll experience turnover and a lack of productivity that will cost you money, ideas, and time. On the other hand, if the work environment is ethical, productive, and positive, people will stay- and stay committed. They'll drive your company forward. (as cited in Covey & Merrill, 2006, p. 252)

Numerous studies have documented the organizational benefits that are derived from trustworthy behaviors. Trustworthy behaviors have been shown to influence employee retention

(Hopkins & Weathington, 2006), reduced absenteeism (Gellatly, 1995), and performance (Crant, 1996; Robertson et al., 2012; Sulliman & Iles, 2000). The implication is that employees who trust their organization will be more motivated and will work harder for the organization. Research has shown that organizational trust creates organizational citizenship behavior, which is a viable predictor of many behaviors. Likewise, a lack of trust has been shown to be a determinant of managerial problem solving effectiveness (Zand, 1972).

Organizational Performance

The research studies on performance have primarily been focused on trust in a direct leader, with only limited research on trust in organizations (e.g., Aryee et al., 2002; Tan & Tan, 2000) and trust in management (e.g., Mayer & Gavin, 2005). When employees trust their organization, they believe that the organization will treat them fairly and not deprive them of the necessary support (Tan & Tan, 2000). This organizational trust fosters motivation and enables employees to focus on their jobs. This inevitably leads to improved organizational performance (Aryee, et al., 2002; Costa, 2003; Erdem & Ozen, 2003; Erdem, Ozen, & Atsan, 2003; Goris et al., 2003; Robertson et al., 2012; Tan & Lim, 2009), and employee retention (Aryee et al., 2002; Connell, et al., 2003; Hopkins & Weathington, 2006; Pool & Pool, 2007).

Employee Retention and Absenteeism

Employee turnover represents a huge cost for organizations. On average, it costs companies one and a half times a worker's annual salary to replace an existing worker (Covey & Merrill, 2006). Once employees gain trust, in a supportive culture, they become motivated to remain in the organization (Aryee et al., 2002; Connell et al., 2003; Hopkins & Weathington, 2006; Pool & Pool, 2007). A summary is presented as Table 5 that summarizes the references used to describe the benefits derived from trustworthy behavior.

Table 5

References to Benefits Derived from Trustworthy Behavior

Reference	Trustworthy behavior				
	Organizational citizenship behavior	Organizational commitment	Extra role behaviors	Employee engagement, involvement	Cooperative, proactive & enterprising behavior
Avey, et al., (2008)		x			
Avolio, et al., (2004)			x	x	
Connell, et al., (2003)	x	x			
Costigan, et al., (2006)					x
Cropanzano, et al., (2007)	x	x			
Dietz & Den Hartog (2006)			x		
Dirks & Ferrin (2002)					x
Gellatly & Withey (2012)	x	x			
Harter, et al., (2002)				x	x
Herscovitch & Meyer (2002)		x		x	x
Kannan-Narasimhan & Lawrence (2012)	x	x			
Konovsky & Pugh (1994)	x	x			
Li, et al., (2012)			x		
Malinen, et al., (2013)		x		x	
Mayer & Gavin (2005)	x				
McAllister (1995)	x				x
Meyer & Allen (1991)		x			
Meyer, et al., (2004)	x	x			
Moorman (1991)	x		x		
Organ & Ryan (1995)	x	x			
Parker, et al., (2006)					x
Pool & Pool (2007)		x			
Ruppel & Harrington (2000)		x			
Saks (2006)	x	x		x	
Stinglhamber, et al., (2006)		x			
Tan & Lim (2009)		x			
Thomas, et al., (2009)				x	

Trust Reinforcement Mechanisms

Once employees begin to achieve improved performance measures, they are rewarded, motivated, and their trust in their leaders is even higher. This higher emotional state will reinforce their trust in the system and stimulate even more trustworthy behaviors. Although this reinforcement has not been directly cited in the literature, the principles involved are the same as those previously reviewed. The research to date has not looked at organizational trust as a self-perpetuating system, so the direct effect of performance on trust is lacking in the literature, but the principles of trust creation still apply. There are at least four distinct mechanisms that support this assertion.

First, as indicated by the dashed line from *organizational benefits* to *leadership antecedents*, it is also theorized that the leadership antecedents will be bolstered by the organizational performance. Since all of the antecedents to trust are variable in nature, it is expected that the performance feedback and associated accolades will strengthen and reinforce the leadership behaviors that stimulate trust.

Second, as shown in the dashed line from *organizational benefits* to *trust inducing behaviors*, the trust-inducing leadership behaviors have been validated by the organization's performance as a result of the aforementioned leadership antecedents. This will build confidence and reassurance in the process and enable an ever greater trustworthy state of mind. This result will be expected to generate even greater amounts of trust inducing behaviors and even higher levels of performance.

Some of the leadership antecedents that would be bolstered by the performance are the leadership behaviors (Avey et al*.,* 2008; Covey & Merrill, 2006), communication (Gibson &

Manuel, 2003; Ruppel & Harrington, 2000), and participative decision making (Driscoll, 1978; Goris et al*., 2003*).

Third, as shown in the dashed line from *organizational benefits* to *propensity to trust,* although the reinforcement of an employee's propensity to trust has not been directly cited in the literature, the belief that the propensity to trust will be strengthened is explained by the expectancy theory as conceptualized by Vroom (1964). According to the expectancy theory propositions, an employee will have two levels of outcomes. The first-level outcome was that of performing a successful job, that level is clearly satisfied by the individual and organizational success. The second-level has three components: that the outcome in the perceived relationship between effort and performance (expectancy) has been validated, that the performance led to rewards (instrumentality) was achieved, and that there was sufficient rewards for the effort expended (Pool & Pool, 2007). Having met these aforementioned conditions should validate the employees' trust in the organization and motivate them to continue and raise the level of trust they have in the organization and therefore take on higher levels of trustworthy behaviors.

A fourth means of generating higher levels of trustworthy behavior, as shown in the dashed lines from *individual benefits* and from *organizational benefits* to *trust inducing behaviors.* The higher levels of motivation derived from success will induce greater confidence and trust in the system. As previously reported, emotions have an effect on trust. When employees have performed well and been rewarded, they are going to be more motivated and more willing to engage in trusting behaviors. The performance will also reinforce and strengthen the perception of the ability and competence of leadership, which has been shown to be antecedents to trust.

A fifth mechanism for expecting greater trustworthy behaviors is simply through the experience that led to performance. Trust levels are continually updated on the basis of experience (Kramer & Cook, 2004). Research has shown that trust increases through successful transactions (Nir et al*.,* 2012; Niu, 2010; Shapiro et al*.*, 1992), through reliability, (Johnson-George & Swap, 1982; Mishra, 1996), and through responsiveness (Johnson-George & Swap, 1982). Since the organizational trust system began with just having enough of the antecedents to pass through the *zone of trust antagonism* overcoming the personal resistance to trust into the *knowledge-based* trust zone, as the employees experience improved performance and the emotional state associated with this success, trust will increase into the *identification-based* trust and *crossing the trust-belief barrier* into a state that yields higher levels of trustworthy behaviors.

Conclusion

Chapter I explained the importance of trust, how to build trust and how to lose trust. It explained that trust is a difficult term to understand and that a common definition of trust does not exist. The behaviors of leadership in high-trust organizations must be consistent with the behaviors that they profess. The leaders must *walk the talk* when they interact with others so that they can avoid eroding the trust that others have in them (Covey & Merrill, 2006). The chapter explained the role of leadership and how leadership behaviors affect the amount of trust individuals have in their organization.

Researchers from various disciplines agree that trust has a number of important benefits to organizations. The primary benefits of trust are positive attitudes, higher levels of cooperation and superior performance. Scholars for several decades have concluded that trust is highly beneficial to organizations. Since trust is the foundation of all business dealings, building and

restoring trust needs to be a major priority of organizational leadership. High-trust organizations have employees that are better at innovation and problem solving (Boss, 1978; Zand, 1972). It is in the organization's best interest to capitalize on the benefits of this behavior in order to be able to more successfully compete in the global marketplace. The presence of a high degree of trust among the employees will help facilitate the transformation of strategic goals into reality.

According to Covey and Merrill (2006), trust is something you must create within your organization in order to increase your immediate and long-term performance. The behaviors of leaders must be perceived as following the values that they profess. If leaders do not *walk the talk* their employees will not take to heart the message that they profess. Effective communication is vital to the building of trust (Covey & Merrill, 2006). An employee who trusts his leadership will communicate openly and will be more willing to become involved and take risks. This behavior is an indication of an employee's organizational commitment. A high level of organizational commitment is the result of an employee's willingness to contribute to the working culture due in part to his or her belief in values and goals of the organization (Covey & Merrill, 2006).

Chapter II provided an extended review of literature about how leadership behavior affects organizational trust. The amount of trust individuals have in their leaders has emerged as a key concept in several leadership theories. The foundation of effective leadership is when leaders are perceived as having a high degree of trust and believed to practice ethical behavior. The formation of trust was explained, as well as how trust can be strengthened or lost through distrust. This was followed by a discussion on the repair of trust. The chapter explains how trust can be assessed on three dimensions of affective, cognitive, and intentional behavior (Cummings and Bromiley, 1996) and how organizational commitment is composed of affective,

continuance, and normative commitment (Allen & Meyer, 1990). Furthermore, it explains the researcher's hypothesis that the three dimensions of trust may be correlated with the three dimensions of organizational commitment.

In Chapter III, the researcher proposes and explains how a quantitative, correlational study could be used to determine the relationship of an employee's trust in his leadership on its organizational commitment. The study used responses to the Organizational Trust Inventory (OTI), the TCM Employee Commitment Survey, and demographic survey questions to determine the relationship between an employees' organizational trust and their organizational commitment.

The researcher explains how two validated instruments could be used to determine the relationship between the dimensions of trust and the dimensions of organizational commitment. The chapter describes the participants, how the rights of the participants would be protected, how the study would be approved by an Internal Review Board (IRB), and how the study would be conducted. It describes the appropriateness of the survey instruments that would be used, how reliable they were, and their internal validity. The chapter concludes with the method used to analyze and evaluate the survey data to determine if the researcher's proposed hypothesis of the relationship between employee trust and organizational commitment was valid. A system model of organizational trust was used to show the antecedents to trust, to explain the affective state that needs to be attained to stimulate trustworthy behaviors, and explain the effects of trustworthy behaviors on organizational performance.

Chapter III: Research Methodology

Introduction

This chapter describes the methodology and research design that was used to study the relationship between trust and organizational commitment. The chapter describes that the purpose of using a quantitative correlational study was to determine the effects of an employee's trust in his leader and the amount of organizational commitment he has. It explains how leadership and organizational trust could be assessed on three dimensions of affective, cognitive, and intentional behavior (Cummings & Bromiley, 1996) and how organizational commitment is composed of the dimension of affective commitment, continuance commitment, and normative commitment (Allen & Meyer, 1990. Furthermore, it explains the researcher's hypothesis that the three dimensions of trust might be correlated with the three dimensions of organizational commitment.

The researcher explains how a study, using two validated instruments and demographic questions, administered to a sample of employees within high-technological organizations was used to determine what relationship, if any, exists between the dimensions of trust and the dimensions of organizational commitment. It describes the participants, how the rights of the participants were protected, how the study was approved by the Pepperdine University Internal Review Board (IRB), and how the study was administered. It describes in detail the two survey instruments that were used, how reliable they were, and their internal validity. The chapter concludes with the method used to analyze and evaluate the survey data to determine if the researcher's hypothesis of the relationship between employee trust and organizational commitment was valid.

Research Design and Rationale

The purpose of this quantitative correlational study was to determine what relationships, if any, exist between the degree of employees' trust in their leader and the amount of organizational commitment they have to the organization. Furthermore, since organizational trust can be assessed on three dimensions of affective, cognitive, and intentional behavior (Cummings & Bromiley, 1996) and organizational commitment is composed of affective, continuance, and normative commitment (Allen & Meyer, 1990), each dimension of trust was compared with each form of organizational commitment to determine if a relationship existed. Data were collected from surveys, using two validated instruments, administered to a sample of employees within three high-technology organizations in a quantitative non-intervention correlational study. Participants were provided an explanation of the study as shown in Appendix A, and were required to sign an informed consent form shown in Attachment B.

Theoretical Framework

The basis of the theoretical foundation for this study was that the affective, cognitive, and intentional behavior dimensions of trust could be measured and would create a state of mind that would affect the affective, continuance, and normative commitment dimensions of organizational commitment. The relationship is shown in Figure 8.
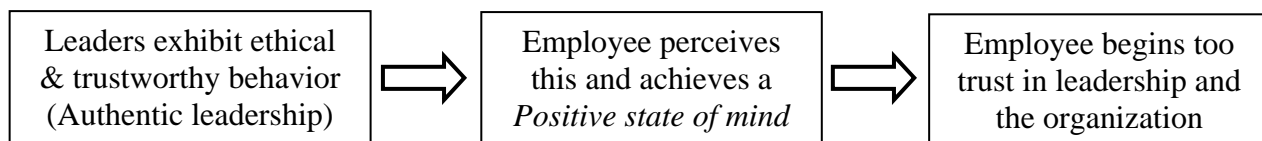

| Leaders exhibit ethical & trustworthy behavior (Authentic leadership) | ⟹ | Employee perceives this and achieves a *Positive state of mind* | ⟹ | Employee begins too trust in leadership and the organization |

Figure 8. Theoretical framework of trust and organizational commitment.

In the theoretical framework for trust in leadership, the relationships shown in italics represent processes and concepts that were parts of the theoretical model but were not examined in the study.

Model and Variables

As previously described, research has revealed that the concept of trust is ambiguous and multifaceted. Cummings and Bromiley (1996) conceptualized the Organizational Trust Inventory (OTI) which measured the three dimensions of trust: (a) belief that the individual or group makes good faith efforts to behave in accordance with explicit and implicit commitments, (b) belief that individuals and groups will be honest in negotiations, and (c) belief that the individuals or groups will not take advantage of one another (Cummings & Bromiley, 1996). The survey questions used in the OTI short form are shown as questions 6 through 17 of the survey questionnaire in Appendix C. Permission to use the OTI survey instrument was provided by Philip Bromiley and is included as Appendix D. The three dimensions of organizational trust and the total amount of trust are the independent variables in this study. The research model depicted as Figure 9 portrays the model for this study.
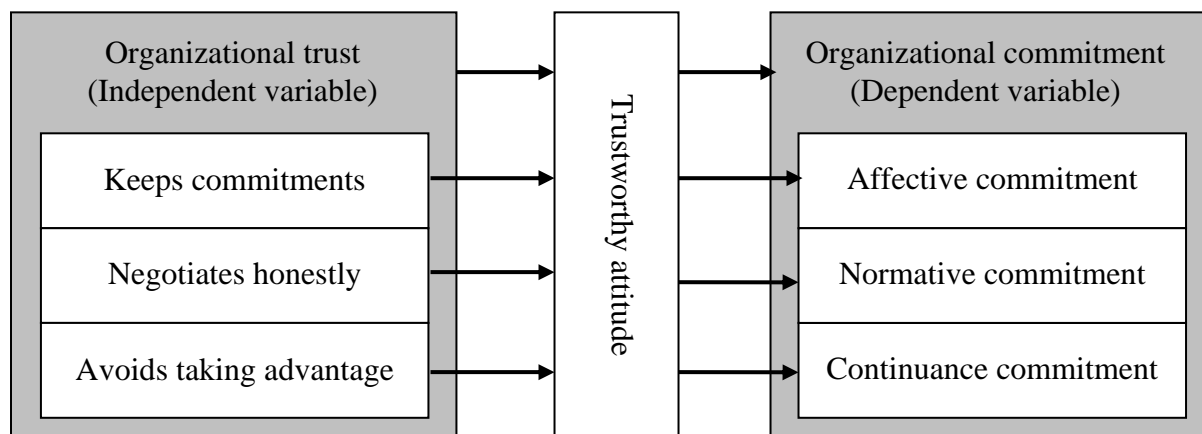

Figure 9. Proposed relationship between trust and commitment.

Independent Variables

The independent variables for the study were the three dimensions of organizational trust as defined by Cummings and Bromiley (1996). Since trust is a foundational component of all

successful relationships and because inefficiencies in an organization are largely the result of employee distrust in management (Mishra & Morrissey, 1990), it is important to nurture trusting relationships in order to illicit the desired employee behaviors. Each of the dimensions of trust is explained below.

The *keeps commitments* **dimension.** The first dimension of trust, *keeps commitments*, is validated by the OTI based on good faith efforts. This dimension asserts that the employee is dependable and can be relied upon to keep his commitments. Survey questions 7, 8, 13, and 15 of the survey measured an individual's perception of how a leader keeps commitments (Cummings & Bromiley, 1996).

The *negotiates honestly* **dimension.** The second dimension of trust, *negotiates honestly*, deals with honesty and implies that an employee's statements and behaviors are consistent with their desires. This dimension of trust is based on the premise that the leader has integrity. Questions 6, 12, 14, and 16 of the survey measured the perception of how a leader negotiates honestly (Cummings & Bromiley, 1996).

The *avoids taking advantage* **dimension.** The third dimension of trust, *avoids taking advantage*, implies that individuals will not take advantage of others for personal gain. The decisions made by individuals will be made based on doing the right thing for the organization or group. Questions 9, 10, 11, and 17 of the survey measured the employees' perception of how much a leader takes advantage of the employee (Cummings & Bromiley, 1996).

In professional relationships, trust improves gradually as the degree of trust moves along the continuum from one trust level to another. As previously discussed, trust grows in escalating levels. It will start initially as *calculus-based trust*, turning into *knowledge-based trust*, and evolving into *identification-based trust* (Lewicki & Bunker 1995). The more one interacts and

communicates with another, the more predictable that person becomes and the higher the level of trust becomes As previously discussed, once the employee has decided that the organization and its leaders are trustworthy, the employee will be in a *trustworthy state of mind* that will foster trustworthy behaviors. The sum of the three dimensions of trust becomes the total amount of organizational trust the employee has and was an independent variable in this study.

Trustworthy Attitude

As previously stated, leaders are interested in exploiting the capabilities of their employees so that they can gain a competitive advantage in the marketplace. Taking advantage of this human capital is generally equated to harvesting as much as possible of an employee's knowledge, skills, abilities, or competencies that come from their experience, education, and specific identifiable skills (Luthans & Youssef, 2004). This human capital is a capability that organizations have, but that capability needs to be transferred into action in order for organization to reap the benefits of their employees' competencies.

Research on positive emotions has shown that when employees have three times as many positive emotions as negative emotions, it leads to high levels of functioning and well-being (Keyes, 2010). Additionally, positive emotions can lead to better decision making (De Clercq et al*.,* 2010), job attitudes, and organizational citizenship behavior (Organ & Ryan, 1995). The belief is that employees who have a positive attitude and feel like an important part of the organization are likely to want to help the organization fulfill its vision. They will then begin performing *trustworthy behaviors* in an effort to do as much as possible to help the leadership and the organization.

Leaders are interested in finding ways to improve how workers feel about their jobs so that workers will become more committed to their organizations. As previously explained,

research has indicated that organizational commitment can predict the behaviors of absenteeism, turnover, job satisfaction, and work motivation. Allen and Meyer (1990) suggested that the value of using a multidimensional model to study organizational commitment is that it provides a fuller understanding of the psychological ties to the organization.

Dependent Variables

Organizational commitment, deals with the psychological connection of workers to their organization. Allen and Meyer (1990) identified three distinct themes underlying an employee's organizational commitment. These are the employee's affective attachment to the organization (affective commitment), the commitment as a perceived cost associated with leaving the organization (continuance commitment), and the commitment derived when an employee feels an obligation to remain with the organization (normative commitment). Each of the three dimensions of organizational commitment was a dependent variable in this study. The sum of the three dimensions becomes the total amount of organizational commitment the employee has and was the final dependent variable in this study.

Employees who feel they are truly an integral part of the organization will most likely have a tendency to want the organization to be successful as a measure of their own success. A high level of organizational commitment is the result of an employee's willingness to contribute to the working culture as part of his or her belief in values and goals of the organization. It indicates that the employee trusts the leaders, is a willing partner in the values and culture of the organization, and desires to support the organization in order to achieve their common goals.

Since the three dimensions of commitment originate from different bases, an employee may experience differing degrees of each component of commitment. The three dimensions of

trust may interact in different ways and have been found to correlate differently with the

dimensions of organizational commitment (Allen & Meyer, 1990; Meyer et al., 1998).

Hypotheses

Organizational trust is a foundational antecedent of employee commitment.

Organizational trust is composed of the three dimensions of keeps commitments, negotiates

honestly, and avoids taking advantage (Cummings & Bromiley, 1995). Likewise, organizational

commitment is composed of the dimensions of affective commitment, normative commitment

and continuance commitment. The researcher posited that each of the three dimensions of trust,

as well as the total amount of organizational trust, would create an attitude that would influence

each of the three dimensions of organizational commitment as well as the total organization

commitment an employee has. The following hypotheses were evaluated to determine the

validity of this supposition.

- $H1_a$: Organizational commitment is positively correlated with the total amount of

  trust in high technology organizations.

- $H1_0$: Organizational commitment is not positively correlated with the total amount of

  trust in high technology organizations.

- $H2_a$: Affective commitment is positively correlated with the total amount of trust in

  high technology organizations.

- $H2_0$: Affective commitment is not positively correlated with the total amount of trust

  in high technology organizations.

- $H3_a$: Organizational commitment is positively correlated with the *keeps commitments*

  component of trust in high technology organizations.

- H3$_0$: Organizational commitment is not positively correlated with the *keeps commitments* component of trust in high technology organizations.

- H4$_a$: Normative commitment is positively correlated with the total amount of trust in high technology organizations.

- H4$_0$: Normative commitment is not positively correlated with the total amount of trust in high technology organizations.

- H5$_a$: Organizational commitment is positively correlated with the *negotiates honestly* component of trust in high technology organizations.

- H5$_0$: Organizational commitment is not positively correlated with the *negotiates honestly* component of trust in high technology organizations.

- H6$_a$: Continuance commitment is positively correlated with the total amount of trust in high technology organizations.

- H6$_0$: Continuance commitment is not positively correlated with the total amount of trust in high technology organizations.

- H7$_a$: Organizational commitment is positively correlated with the *avoids taking advantage* component of trust in high technology organizations.

- H7$_0$: Organizational commitment is not positively correlated with the *avoids taking advantage* component of trust in high technology organizations.

A diagram shown as Figure 10 depicts the proposed hypothesis of the research study.
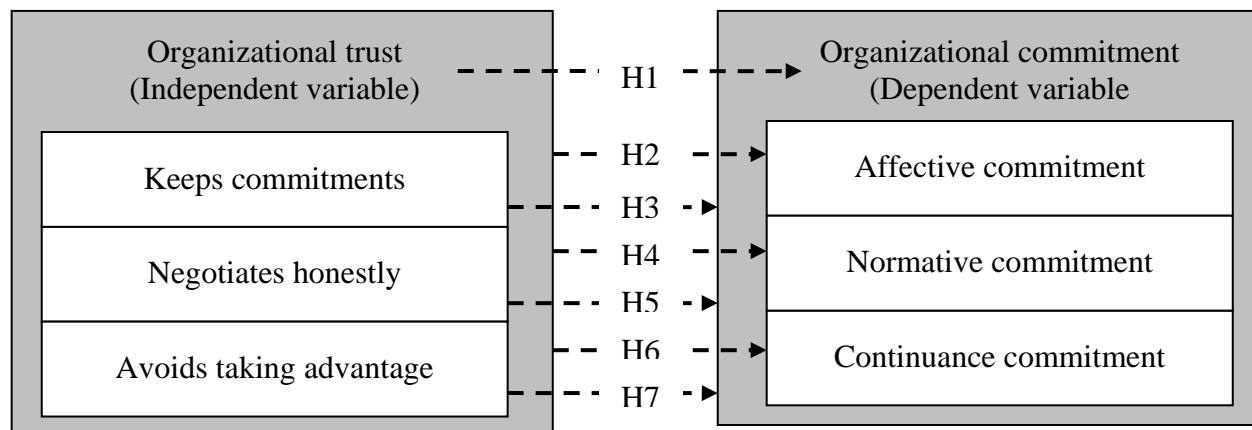
Figure 10. Proposed model of organizational trust outcomes.

Structural Model

Path diagrams can be used to show the correlations between variables. A unidirectional

arrow from the unobserved variable (such as trust) to an observed variable behavior (such as

keeps commitments) indicates that the observed variable is influenced by their respective

underlying factors. The abbreviation codes shown in Table 6 are used to describe the proposed

path diagrams.

Table 6

Path Diagram Codes

Organizational trust		Organizational commitment	
Code	Variable	Code	Variable
OT	Organizational trust	OC	Organizational Commitment
KC	Keeps commitments	AC	Affective commitment
NH	Negotiates honestly	NC	Normative commitment
ATA	Avoids taking advantage	CC	Continuance commitment
TOT	Total organizational trust	TOC	Total organizational commitment

A path model representing the relationship of the dimensions of trust to organizational

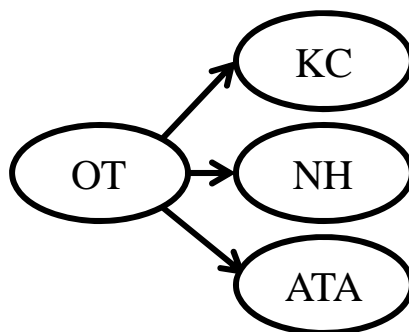trust is shown is shown in Figure 11.

Figure 11. Organizational trust path diagram.

Likewise, the relationship of the three dimensions of organizational commitment to total commitment is depicted in a path model as shown in Figure 12.
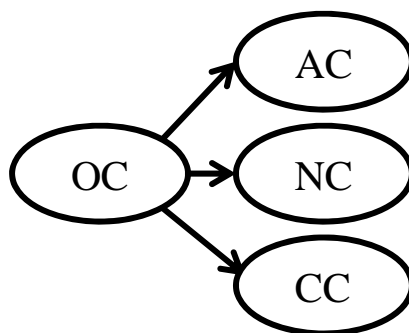

Figure 12. Organizational commitment path diagram.

Combining the two path models of trust and commitment creates an initial model relating trust to commitment that is shown in Figure 13.
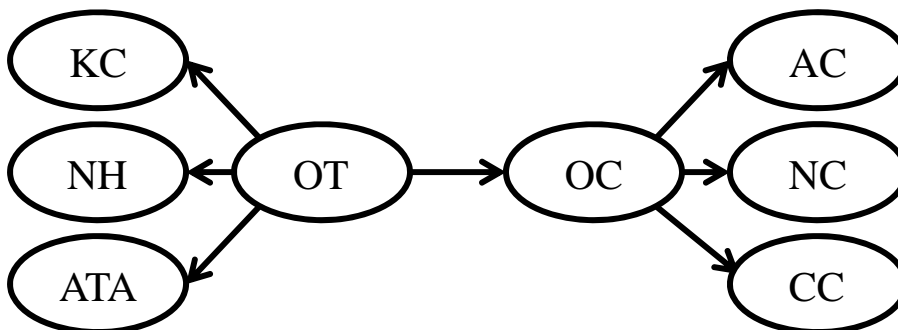

Figure 13. Initial model of trust to commitment.

The study was conducted on high-technology organizations to determine if the hypothesized relationships between trust and organizational commitment existed. Due to the high reliability requirements for high technology products and the cost of investigations and failure analysis associated when manufacturing anomalies occur, it is believed that it is important to have employees that trust the organization so that organizational commitment can be nurtured. Research has indicated that organizational commitment can predict the behaviors of absenteeism (Avey et al*.,* 2008; Gellatly, 1995; Mathieu & Zajac, 1990), turnover (Aryee et al*.,* 2002; Connell et al*.,* 2003; Hopkins & Weathington, 2006; Jaros, 1997; Podsakoff et al*.,* 2009), job satisfaction (Hopkins, & Weathington, 2006; Perry, & Mankin, 2007; Pool & Pool, 2007; Robertson et al*.*, 2012), and work motivation (Meyer et al*.,* 2004).

Procedures

Organization leaders of high technology organizations were solicited to allow participation of their employees in the study. The study population was comprised of a combination of both exempt and non-exempt personnel working for the selected organizations. The selected organization consisted of a diverse spectrum of differing jobs classifications, ages, genders, and years of service. Since the OTI has not been validated to be reliable for employee's that have not worked for the organization for at least one month, only employees who have worked for the organization for at least one month and are over the age of eighteen were allowed to participate in the study. Written (email) consent from the organization leaders was obtained and submitted to the Pepperdine University Internal Review Board (IRB) before administering the survey to the target population.

Research plan. The study began with the approval of a research plan. The research plan included appropriate approvals, a pilot study, and an explanation of the protection of human

subjects. Before a researcher conducts a survey that involves human subjects, it is important to ensure that individual rights will not be violated. The proposed survey plan was submitted to the Pepperdine IRB for approval before commencing with the study. A copy of the IRB approval letter is included as Appendix E. An overview of the proposed research plan is represented in Figure 14.
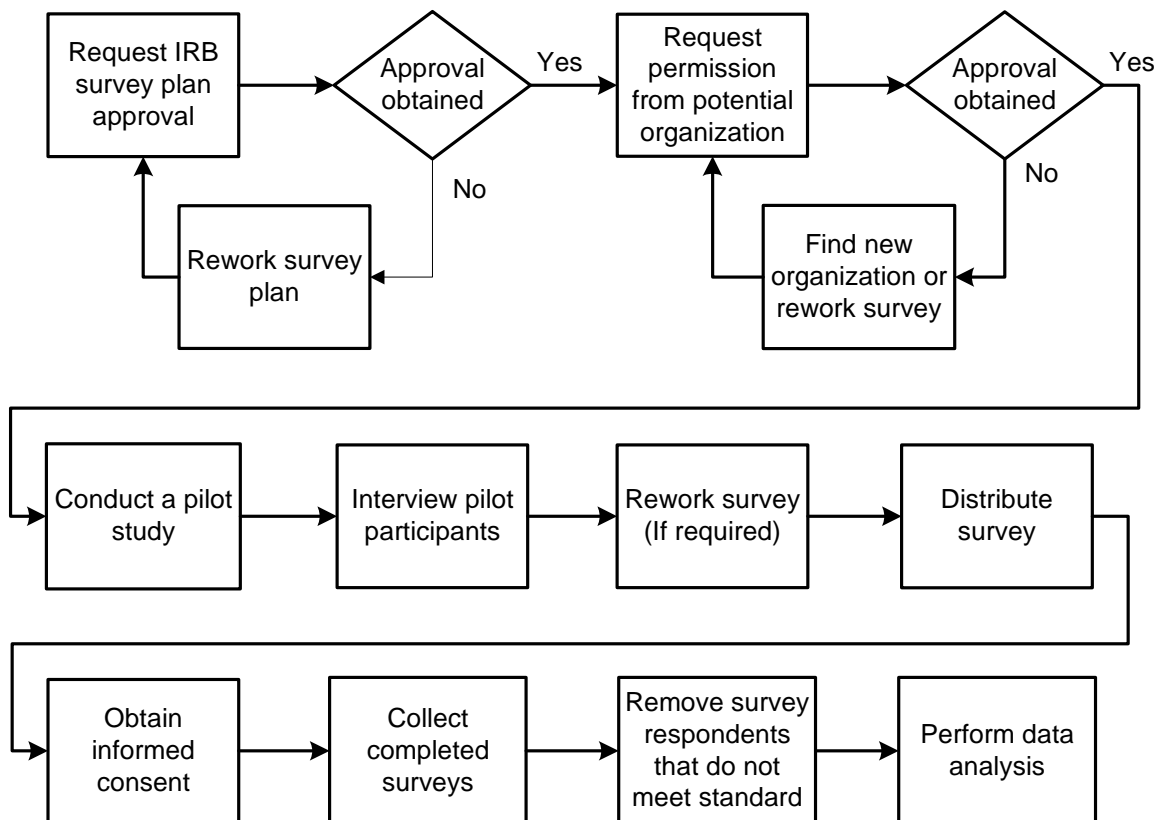
Figure 14. Research plan.

IRB Approval. Before approaching prospective organizations to request permission to solicit their cooperation in the study, it was important for the researcher to understand all of the requirements that the IRB may impose on the study. After approval from the Pepperdine University IRB had been granted, the researcher began to contact high technology organizations to see if they would allow a survey to be conducted of their organization's employees.

Pilot study. The survey used two validated instruments and demographic questions. However, since there might have been some ambiguity in the wording of the demographic questions, a small scale pilot study was conducted to validate the survey's clarity and to ensure the ease of completion before administering to the larger population. The participants for the pilot study were employees of high technology organizations that were not part of the target population of the study. After completing the pilot survey, the participants were asked for their opinions on the clarity of the instructions provided and the demographic questions asked.

Informed consent. It is important to get the consent of the participants when research involves human participants. Consent was obtained from all participants before they took part in the survey. Participants were provided sufficient information about the use of the data provided in the survey and what personal information would be shared. As stated in the introductory letter, participation in the survey was voluntary. Participants were informed that by turning in the completed survey, they were providing their consent to use their data in the study. Employees who were not sure if they wanted to fill out the survey at the present time were given the option of mailing the completed survey and informed consent form to the researcher. A stamped envelope with the researcher's address was provided to the participants who chose to use this option. The participants were informed that only survey responses that were returned in this specific envelope, within two weeks, would be included in the study results. A copy of the informed consent agreement was included at the beginning of the survey questionnaire.

Instrumentation

Employees were asked to complete a 35- question survey that was constructed to determine their thoughts and beliefs. The survey was constructed by combining the 12-item OTI, constructed by Cummings and Bromiley (1996), the 18-item TCM Organizational

Commitment survey constructed by Meyer and Allen (2004), and five demographic questions.

An integrated survey was used for this study. The survey contained three components: (a) the

OTI developed by Cummings and Bromiley (1996) was used to measure trust, (b) the TCM

Employee Commitment survey developed by Meyer and Allen (2004) was used to determine an

individual's organizational commitment, and (c) five questions were used to determine the

demographics of the individuals in the study.

     Organizational trust inventory (OTI). The OTI was initially developed and validated

using responses from a sample population from 323 employees and students from the University

of Minnesota. The final measure had 62 trust questions and 19 behavioral items. The instrument

has a strong theoretical foundation and exhibits mathematically high and consistent reliability

and homogeneity, as well as convergent and discriminant validity. Based on the results of seven

case studies, the OTI was demonstrated to be psychometrically acceptable and stable (Cummings

& Bromiley, 1996). It is therefore a good choice to be used as a reliable and valid two-

dimensional measure of a person's trust in his or her supervisor and trust in the organization as a

whole.

     In order to reduce the amount of time it took to administer the instrument, Cummings and

Bromiley (1996) modified the original eighty-one question OTI into a reduced form containing

only 12 questions. The short-form OTI was chosen for this study because it was previously

validated and had demonstrated acceptable reliability. The study used a quantitative cross-

sectional design methodology where all of the research data were collected through the

administration of a survey provided to employees of three selected high-technology

manufacturing organizations. The OTI instrument uses a seven-point Likert scale with higher

scores being indicative of higher levels of trust. Survey questions 9, 10, 11, 15, and 17 reverse

ordered to minimize reverse mode bias. The OTI survey has four items measuring trust in the organization as a whole and eight items that measure trust in the supervisor.

Three component model (TCM) employee commitment survey. Allen and Meyer (1990) developed a 24-item survey to measure the organizational commitment scales of affective, normative, and continuance commitment an individual has to the organization. These scales were used to develop the three component model of commitment which was further refined by Meyer, Allen, and Smith (1993) to become the eighteen-item TCM Employee Commitment Survey (TCM) that was used in this survey (Meyer & Allen, 2004).

The TCM has reliability estimates that are well established. Meyer and Allen (1997) used alpha coefficients from multiple studies to determine that the median scale reliabilities for the affective, continuance, and normative scales are .85, .79, and .73 respectively. Test-retest reliabilities have varied in longitudinal studies, though reliability measures exceed .60 when survey respondents had a least one month of job tenure. A license to use the TCM Employee Commitment Survey (2004) was obtained for academic research purposes and is included as Appendix F. In this survey, questions 18 through 23 were validated to measure affective commitment, questions 24 through 29 measured normative commitment, and questions 30 through 35 measured an employee's continuance commitment. Questions 20, 21, 22, and 30 were worded so that a strong agreement actually reflected a lower level of commitment to minimize reverse mode bias. A summary of the question mapping is shown in Table 7.

Table 7

Survey Question Mapping

OTI Instrument question mapping		TCM Instrument question mapping	
Keeps commitments	7, 8, 13, 15	Affective commitment	18 through 23
Negotiates honestly	6, 12, 14, 16	Normative commitment	24 through 29
Avoid taking advantage	9, 10, 11, 17	Continuance commitment	30 through 35
Reverse ordered	9, 10, 11, 15 and 17	Reverse ordered	20, 21, 22 and 30

Data Collection and Recording

Data were obtained through the administration of a paper survey that was presented to the employee at the conclusion of regularly scheduled employee meetings. The researcher personally administered and collected the surveys.

The survey instructions requested the participants to select the most accurate responses to each item provided in a Likert-type rating scale. According to McCall (2001), Likert-type scales can be useful when addressing the needs to consider when assessing the opinions and attitudes towards potential policy decisions. The survey used a 7-point Likert-type scale where respondents were asked to pick the best choice from the provided responses to each question. The scale asked for a differentiation between the extremes of *Strongly Disagree* and *Strongly Agree*. A numerical value was assigned to each answer so that it would be easier to perform statistical analysis on the results. A sample question is shown in Figure 15.

Strongly Disagree	Disagree	Slightly Disagree	Neither Agree or Disagree	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

I think people in management tell the truth in negotiations. 1 2 3 4 5 6 7

Figure 15. Sample survey question.

The researcher collected and reviewed all of the survey responses. Incomplete surveys and completed surveys where the employee did not meet the minimum length of employment or age requirements were discarded and destroyed.

Data Processing and Analysis

The information obtained during the data collection period on the employee demographics, degree of employees' trust in their leaders, the employee's organizational commitment was analyzed to determine if the hypotheses were correct. After the data collection period had expired, the numerical scores for the reversed coded questions were reversed so that lower scores would indicate an employee low in the desired outcome and the higher scores indicate a high level of the desired variable.

The data were analyzed to perform item analysis to determine the reliability of the questions and factor analysis to determine the validity of the study. The data were then scrutinized for evidence of reliability by loading the raw statistics into a statistical software program and comparing Cronbach's alpha values to ensure that the data were statistically relevant due to internal consistency or reliability. Questions without a sufficient Cronbach's alpha value were eliminated from the analysis and the data reanalyzed with those questions removed from the analysis due to the insufficient validity of the results. The data were summarized using descriptive statistics so that they could be used for future comparisons.

Statistical analysis. Using bivariate correlation analysis (Pearson product moment correlation), the data were analyzed to draw inferences about what relationships, if any, existed between the four dimensions of trust and the four dimensions of organizational commitment. Furthermore, partial correlation analysis was conducted comparing each of the four dependent variables with each of the four independent variables after controlling for demographic variables.

A non-experimental, correlational method research design was used to measure the correlation between the variables. The researcher analyzed the co-variation or correlation between the dimensions of organizational trust and the dimensions of organizational commitment. While controlling for demographics, the researcher used a cross-sectional survey design where bivariate correlation and multivariate regression was used as the primary methods for conducting statistical analysis.

Regression analysis. Bivariate correlation analysis was used to determine the strength of the relationship between the variables of overall organizational trust and overall organizational commitment. To obtain the overall score for each of these constructs, the scores for each of the dimensions of the variable were computed from the average score for each component of each variable. The average score for organizational trust was computed from the three mean scores of each of the three components of trust (keeps commitments, negotiated honestly, and avoids taking advantage). Similarly, the mean scores for each component of organizational commitment (affective, normative, and continuance commitment) was averaged to obtain an overall score for organizational commitment.

Multivariate regression was used to determine the correlation of two or more independent variables and one dependent variable. The average score was determined through the use of bivariate analysis. Regression analysis was used to determine the strength of the relationship. The bivariate correlation was performed between the three components of organizational trust and the three dimensions of organizational commitment.

Summary

Chapter III described the methodology and research design that was used to study the relationship between the amounts of trust an individual has in the leaders and the amount of

organizational commitment the employee has. The chapter provided the rationale for using a quantitative correlational study and explained how trust could be assessed on three dimensions of affective, cognitive, and intentional behavior (Cummings & Bromiley, 1996) and that organizational commitment is composed of the dimensions of affective, continuance, and normative commitment (Allen & Meyer, 1990). Furthermore, it explained the researcher's hypotheses that trust might be correlated with the three dimensions of organizational commitment.

The chapter described a study to administer a survey to a sample of employees within high-technological organizations to determine what relationship, if any, existed between the dimensions of trust and the dimensions of organizational commitment. The chapter described the participants, how the rights of individuals were protected, and how the study was approved by an IRB and administered. It described in detail the two survey instruments that were used, how reliable they were, their validity, and the appropriateness of their use in this study. The chapter concluded with the methods used to analyze and evaluate the survey data to determine if the researcher's hypotheses of the relationship between employee trust and organizational commitment were valid.

Chapter IV: Results

Chapter III described the methodology and research design that was used to study the relationship between the amount of trust an individual has in his or her leader and the organization and the amount of organizational commitment he or she has. The study adds to the body of knowledge on organizational trust by Cummings and Bromiley (1996) as well as that of Allen and Meyer (1990) who used the Three Component Model (TCM) to assess organizational commitment. The chapter provided the rationale for using a quantitative correlational study and explained how trust could be assessed on three dimensions of affective, cognitive, and intentional behavior (Cummings & Bromiley, 1996) and that organizational commitment is composed of the dimensions of affective, continuance, and normative commitment. Furthermore the study provided a means to evaluate the researcher's hypothesis that the dimensions of trust are positively correlated with the three dimensions of organizational commitment.

Chapter IV describes the results of the study. It includes a description of the population, including participant demographics and an explanation of the statistical analysis. Statistical correlations and scatter diagrams are provided to explain each relationship. The chapter concludes with the method that was used to analyze and evaluate the survey data to determine if the researcher's proposed hypotheses were valid.

Participation

There were a total of 31 surveys returned out of the 42 surveys distributed, reflecting a response rate of 74%. The participants were solicited from a cross-section of three different high-technology organizations and consisted of a diverse spectrum of differing jobs classifications, ages, genders, and years of service from a combination of both exempt and non-exempt personnel.

Demographic Characteristics

The study participants provided demographic data that included their age, gender, job position, and the years of seniority each had with the organization. The age of the participants in the population ranged from 21 to 66 years. The years of service with the organization ranged from one year to 33 years of service. Table 8 and Figure 16 show the demographic statistics.

Table 8

Demographic Statistics

Demographics (*N*=31)	Min	Max	Mean	Std. Dev.
Age	21.00	66.00	51.45	10.59
Seniority	1.00	33.00	10.66	10.17

As shown in Figure 16, the histogram for age reveals that there are relatively few younger employees with most of the employees being either middle aged or seniors. Additionally, although the mean seniority rate is 10.66 years, the histogram for seniority reveals a positively skewed distribution with about half the population with less than 5 years of service.
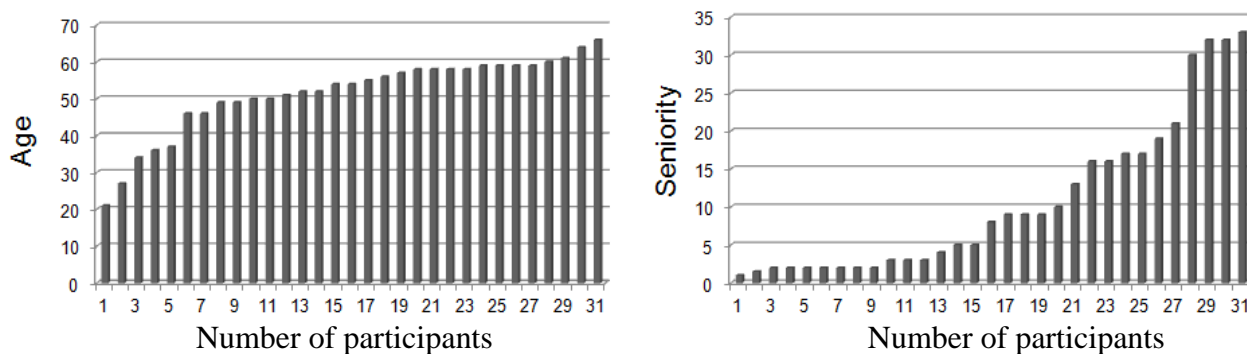

Figure 16. Charts of age and seniority.

As shown in Figure 17, the pie charts for position and gender reveal that 58% of the surveyed population are females and that one-third of the population consisted of support staff.
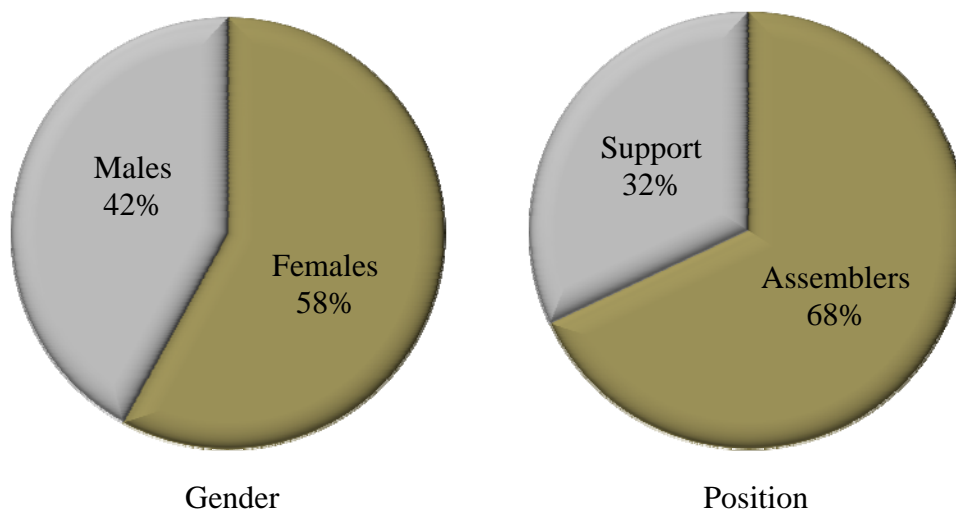
Figure 17. Charts of gender and position.

Data Processing and Analysis

A quantitative correlational study was used to determine the effects of an employee's trust in his or her leader and the amount of organizational commitment he or she has. The data were analyzed for evidence of reliability by loading the raw statistics into a statistical software program and comparing Cronbach's alpha values to ensure that the data were statistically relevant due to internal consistency and reliability. If warranted, any questions without a sufficient Cronbach's alpha value were eliminated from the analysis due to the insufficient validity of the results.

An analysis of the 30 non-demographic survey items was made to determine if the relationships between the dimensions of trust were significantly related to the dimensions of organizational commitment. The values for the minimum, maximum, mean, and standard deviation were calculated for the independent variables of organizational trust as well as the dependent variables of organizational commitment. The survey consisted of 30 items using a response scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The survey incorporated

the three trust dimensions of affective, cognitive, and intentional behavior with the 18-item TCM

employee commitment survey that consisted of three six-item sections that correspond to the

amount of affective, normative, and continuance commitment. Both instruments consisted of

some negatively worded questions to reduce the likelihood of acquiescent bias. For analysis

purposes, after receiving the completed surveys, the scores of the negatively worded questions

were reversed so that higher score values represent higher levels of trust and commitment. Each

of the dimensions of trust was summarized using descriptive statistics so that it could be used for

future comparisons.   Table 9 displays the result of the descriptive statistics of the variables.

Table 9

Trust and Organizational Commitment Descriptive Statistics

Organizational trust (*N*=31)	Min	Max	Mean	Std. Dev.
Keeps commitments	2.50	6.75	4.83	0.97
Negotiates honestly	1.00	6.50	4.52	1.24
Avoids taking advantage	1.00	7.00	3.85	1.36
Total trust	1.50	6.75	4.40	1.19
Affective commitment	2.17	6.67	4.30	1.07
Normative commitment	2.67	6.83	4.66	1.07
Continuance commitment	1.67	7.00	4.61	1.41
Total commitment	2.17	6.83	4.52	1.19

Total trust. There are 12 OTI research questions that determine the participant's trust

level. The Cronbach's alpha value for total trust was determined to be .895 by comparing the 12

OTI questions. The data for the 12 trust-related questions were scrutinized to determine if any of

the questions should be deleted from the overall analysis to increase the internal consistency of

the data. The analyses determined that the Cronbach's alpha value could be raised to .906 if

question number 15 was deleted from the survey data. The researcher decided not to remove this

question because the entire scale had been used in previous research. The Cronbach's alpha

values are shown in Table 10.

Table 10

OTI Question Correlations

	Scale Mean if item deleted	Scale Variance if item deleted	Corrected item total correlation	Squared multiple correlation	Cronbach's alpha if item deleted
AT Question 9	49.00	126.40	0.62	0.77	0.89
AT Question 10	49.06	135.93	0.53	0.53	0.89
AT Question 11	48.94	127.60	0.66	0.78	0.88
AT Question 17	48.81	126.96	0.62	0.70	0.89
KC Question 7	47.65	137.64	0.60	0.67	0.89
KC Question 8	47.81	130.96	0.71	0.75	0.88
KC Question 13	48.16	128.67	0.73	0.82	0.88
KC Question 15	48.29	142.88	0.24	0.39	0.91
NH Question 6	48.10	131.09	0.58	0.74	0.89
NH Question 12	48.35	130.50	0.66	0.68	0.88
NH Question 14	48.39	126.25	0.81	0.83	0.88
NH Question 16	48.32	131.89	0.66	0.61	0.88

Affective commitment. The Cronbach's alpha values for each of the three dimensions

of organizational commitment were scrutinized for reliability. The Cronbach's alpha value for

affective commitment was determined to be .66 by comparing the six TCM questions associated

with affective commitment.   The data for the six affective commitment questions were

scrutinized to determine if any of the questions should be deleted from the overall analysis. The

analyses showed that the Cronbach's alpha value could be raised to .663 if question number 23

was removed and to .701 if question number 18 was deleted from the survey. The researcher

decided not to remove these questions because the entire scale had been used in previous

research. The Cronbach's alpha values are shown in Table 11.

Table 11

Affective Commitment TCM Question Correlations

	Scale Mean if item deleted	Scale Variance if item deleted	Corrected item total correlation	Squared multiple correlation	Cronbach's alpha if item deleted
AC Question 18	20.39	35.51	0.13	0.23	0.70
AC Question 19	22.00	31.87	0.30	0.14	0.65
AC Question 20	21.68	27.83	0.54	0.56	0.56
AC Question 21	21.94	25.00	0.75	0.69	0.47
AC Question 22	21.97	29.63	0.43	0.50	0.60
AC Question 23	21.06	34.60	0.24	0.09	0.66

Normative commitment. The Cronbach's alpha value for normative commitment was determined to be .692 by comparing the six TCM questions associated with that dimension of commitment.   The data for the six normative commitment questions were scrutinized to determine if any of the questions should be deleted from the overall analysis. The analyses showed that the Cronbach's alpha value could be raised to .716 if question number 28 was removed from the analysis. The researcher decided not to remove this question. The Cronbach's alpha values are shown in Table 12.

Table 12

Normative Commitment TCM Question Correlations

	Scale Mean if item deleted	Scale Variance if item deleted	Corrected item total correlation	Squared multiple correlation	Cronbach's alpha if item deleted
NC Question 24	22.81	32.03	0.35	0.37	0.67
NC Question 25	23.26	26.87	0.59	0.63	0.59
NC Question 26	22.97	28.83	0.54	0.51	0.61
NC Question 27	23.58	27.92	0.56	0.50	0.60
NC Question 28	23.90	34.76	0.21	0.21	0.72
NC Question 29	23.16	33.01	0.30	0.30	0.69

Continuance commitment. The Cronbach's alpha value for continuance commitment was determined to be .871 by comparing the six TCM questions associated with that dimension of commitment. The data for the six continuance commitment questions were scrutinized to determine if any of the questions should be deleted from the overall analysis. The analyses showed that the Cronbach's alpha value could be raised to .915 if question number 30 was removed from the analysis. The researcher decided not to remove this question. The Cronbach's alpha values are shown in Table 13.

Table 13

Continuance Commitment TCM Question Correlations

	Scale Mean if item deleted	Scale Variance if item deleted	Corrected item total correlation	Squared multiple correlation	Cronbach's alpha if item deleted
CC Question 30	23.29	60.68	0.26	0.14	0.92
CC Question 31	23.32	45.36	0.83	0.80	0.82
CC Question 32	23.65	48.50	0.74	0.74	0.84
CC Question 33	22.35	52.97	0.67	0.51	0.85
CC Question 34	23.00	46.73	0.84	0.80	0.82
CC Question 35	22.61	52.25	0.76	0.71	0.84

Regression Analysis

Regression analysis was used to determine the strength of the relationship between the variables of trust and organizational commitment. To determine the total trust values, all 12 questions in the OTI were used. To determine the overall commitment values, all 16 items in the TCM were used. The bivariate correlation between the components of organizational trust and organizational commitment are shown in Table 14.

Table 14

Table of Correlations and Significance

	Organizational Commitment				Organizational Trust			
	Affective commitment	Normative commitment	Continuance commitment	Total commitment	Keeps commitments	Negotiates honestly	Avoids taking advantage	Total trust
Affective commitment	—	—	—	—	—	—	—	—
Normative commitment	-.12	—	—	—	—	—	—	—
Continuance commitment	.45*	.08	—	—	—	—	—	—
Total commitment	.60**	.60**	.87**	—	—	—	—	—
Keeps commitments	.55**	.49**	.49**	.45**	—	—	—	—
Negotiates honestly	.43*	-.08	.44*	.37*	.82**	—	—	—
Avoids taking advantage	.58**	-.25	.19	.22	.64**	.52**	—	—
Total trust	.59*	-.16	.41*	.39*	.92**	.88**	.84**	—

** Correlation is significant to .01 level (2-tailed)

* Correlation is significant to .05 level (2-tailed

Hypotheses Testing

As previously discussed, the instruments chosen for the study were reliable and valid, so there were no hypotheses concerning the correlations within the dimensions of trust or within the dimensions of organizational commitment. For completeness, the analysis was made of theses correlations and is shown in Table 15, but a detailed discussion of these relationships is beyond the scope of this dissertation.

Trust relationship to total commitment. Hypothesis 1 predicted that the total amount of amount of trust is positively correlated with the total organizational commitment in high technology organizations. From the correlations table, it can be seen that two variables were positively correlated $r(29) = .39, p < 0.11$. We can conclude that this hypothesis is accepted and the null hypothesis for hypothesis 1 is rejected. An inspection of the scatter plot shown as Figure 18 reveals that the relationship is linear.
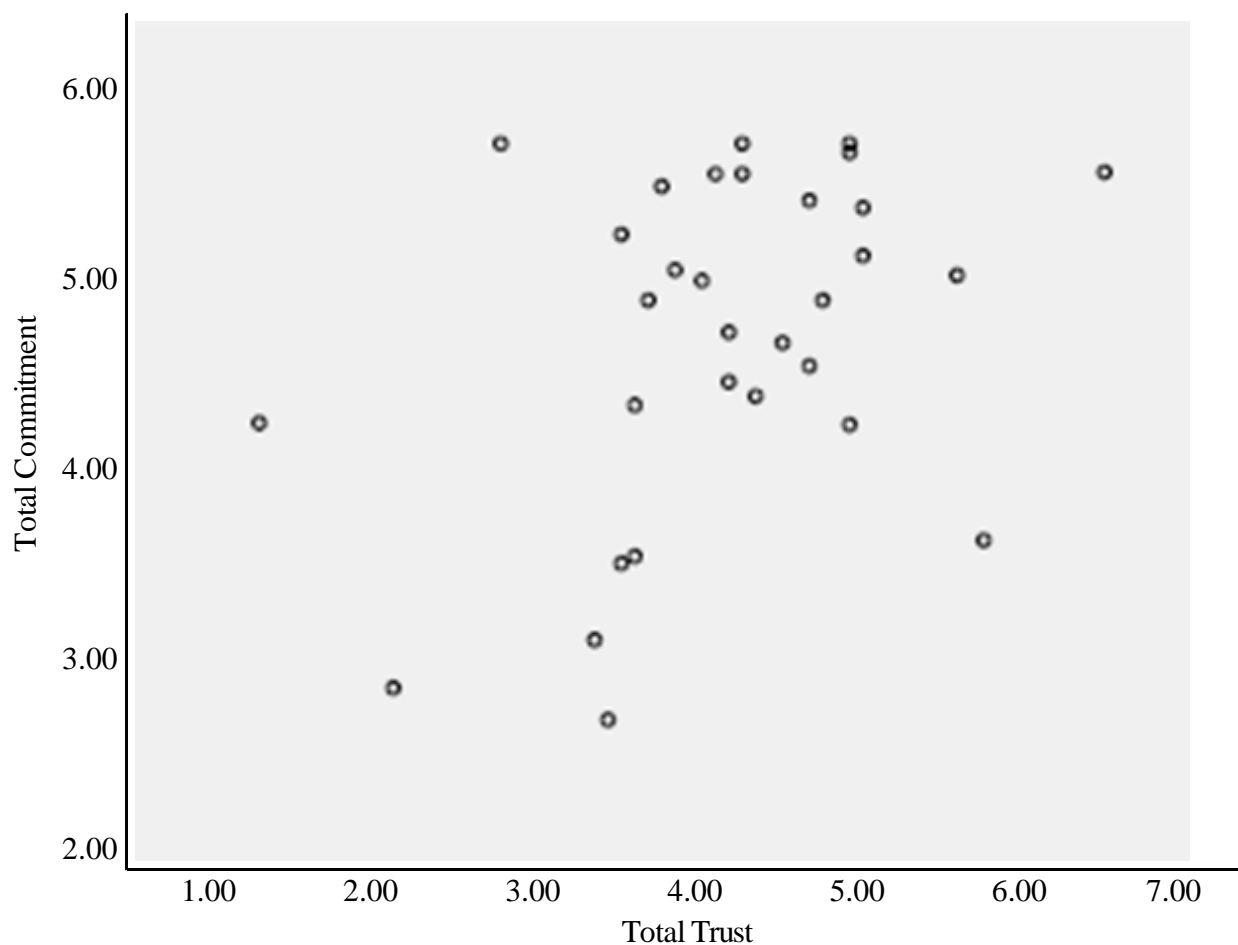
Figure 18. TT to TC scatter diagram.

Trust relationship to affective commitment. Hypothesis 2 predicted that the total amount of trust dimension is positively correlated with the affective commitment dimension in high technology organizations. From the correlations table, it can be seen that two variables

were positively correlated $r(29) = 0.59$, $p < 0.01$. We can conclude that this hypothesis is accepted and the null hypothesis for hypothesis 2 is rejected. An inspection of the scatter plot shown as Figure 19 reveals that the relationship is linear.
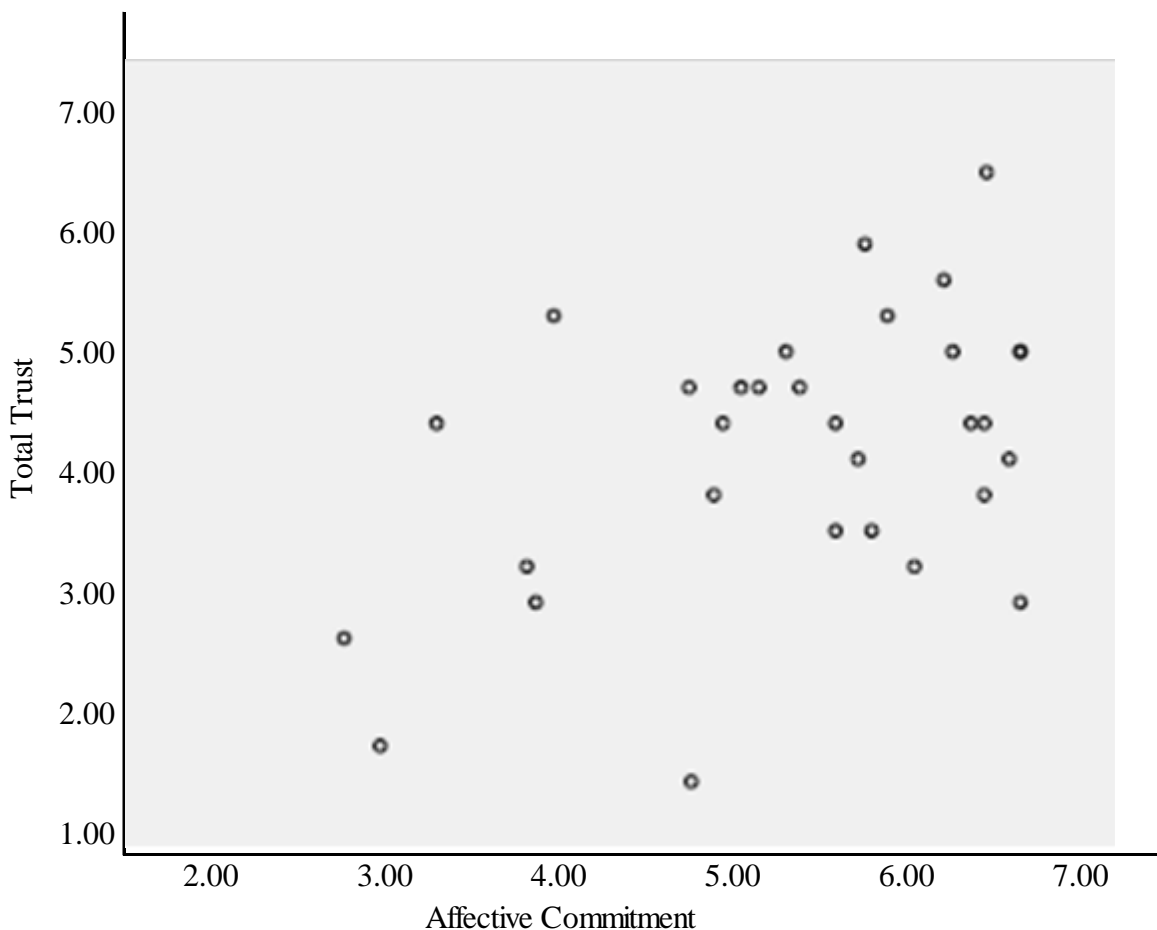

Figure 19. TT to AC scatter diagram.

Keeps commitments to organizational commitment. Hypothesis 3 predicted that the Keeps Commitments dimension of trust is positively correlated with the total amount of organizational commitment in high technology organizations. From the correlations table, it can be seen that two variables were positively correlated $r(29) = 0.45$, $p < .011$. We can conclude that this hypothesis is accepted and the null hypothesis for hypothesis 3 is rejected. An inspection of the scatter plot shown as Figure 20 reveals that the relationship is linear.
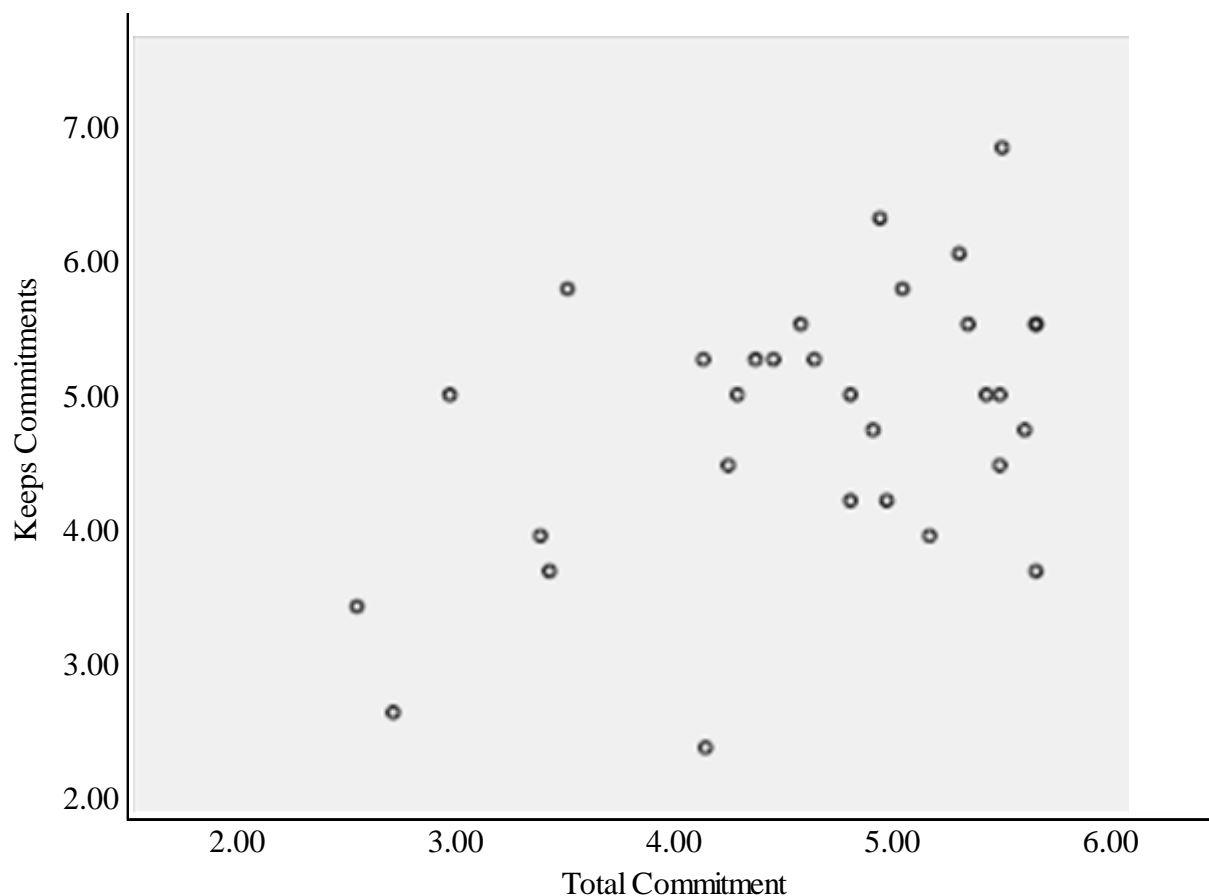
Figure 20. KC to TC scatter diagram.

Trust relationship to normative commitment. Hypothesis 4 predicted that the total amount of trust is positively correlated with that of normative commitment in high technology organizations. From the correlations table, it can be seen that two variables were not positively correlated $r(29) = 0.16$, $p = 0.38$. We can conclude that this hypothesis is rejected and the null hypothesis is accepted.

Negotiates honestly dimension to total organizational commitment. Hypothesis 5 predicted that the *negotiates honestly* dimension of trust is positively correlated with the total amount of organizational commitment in high technology organizations. From the correlations table, it can be seen that two variables were positively correlated $r(29) = .37$, $p = 0.39$. We can

conclude that this hypothesis is accepted and the null hypothesis is rejected. An inspection of the scatter plot shown as Figure 21 reveals that the relationship is linear.
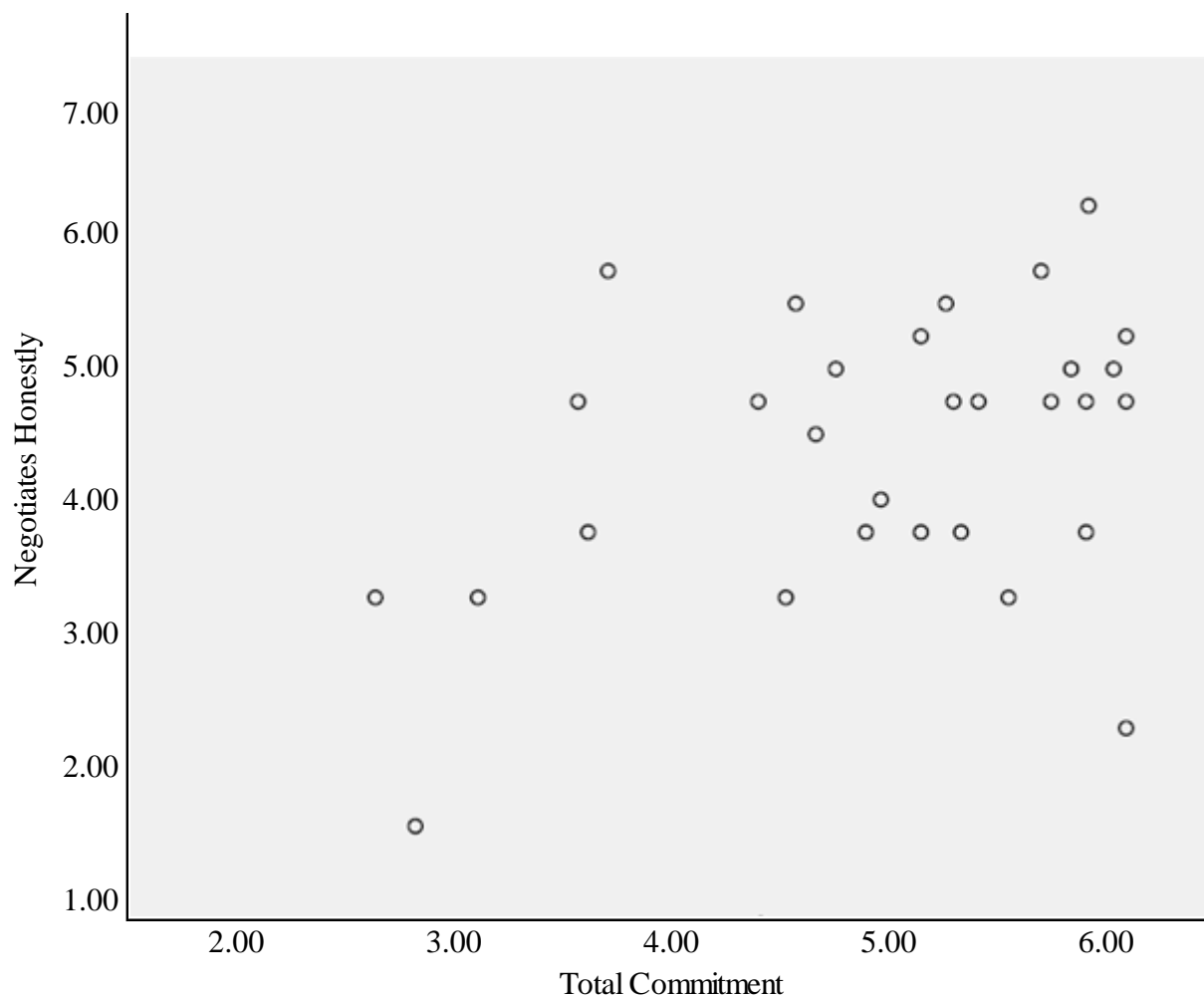

Figure 21. NH to TC scatter diagram.

Trust relationship to continuance commitment. Hypothesis 6 predicted that the dimension of the total amount of trust is positively correlated with continuance commitment in high technology organizations. From Table 14, it can be seen that two variables were positively correlated $r(29) = 0.41$, $p = .022$. We can conclude that this hypothesis is accepted and the null hypothesis for hypothesis 6 is rejected. An inspection of the scatter plot shown as Figure 22
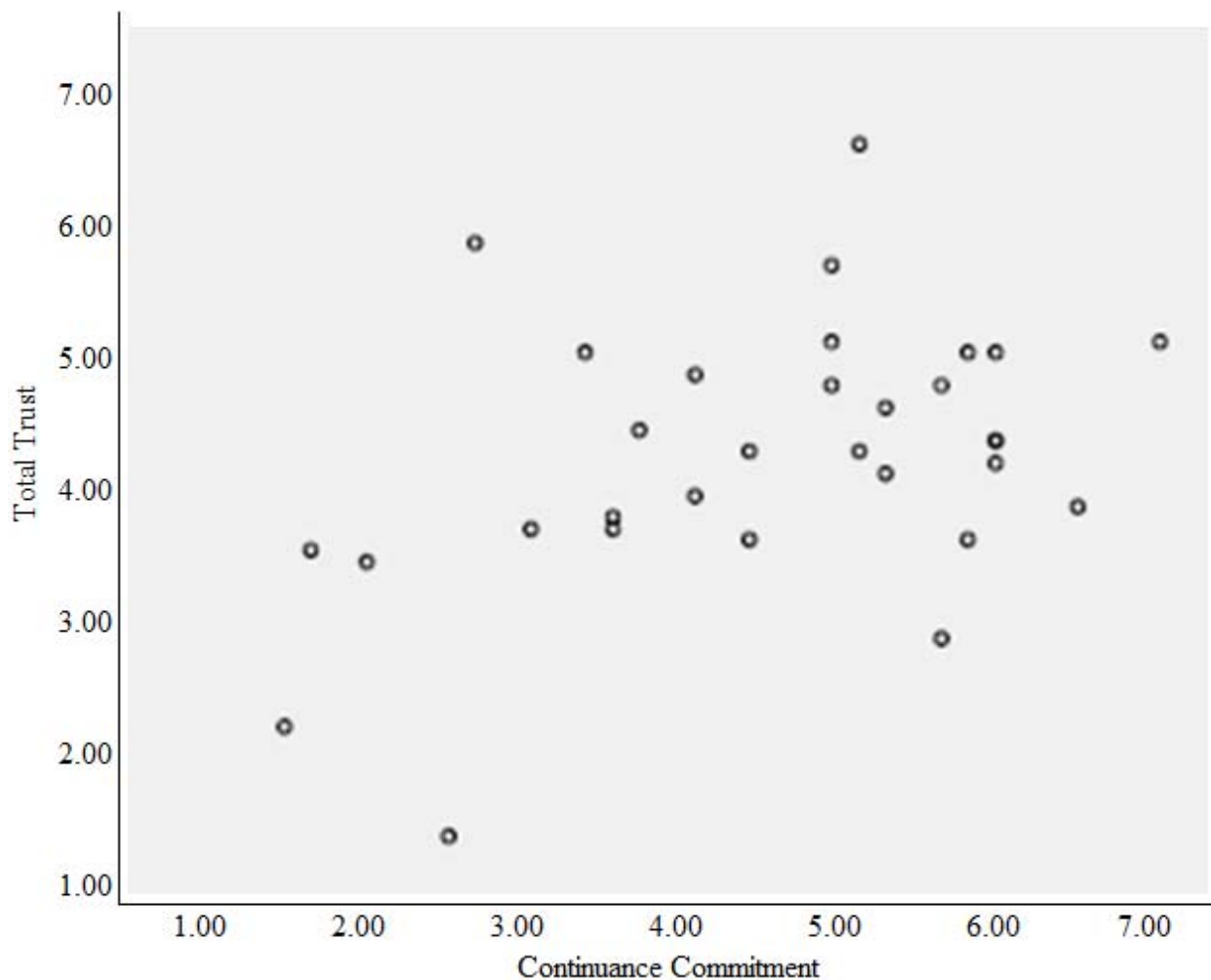
reveals that the relationship is linear.

Figure 22. TT to CC scatter diagram.

Avoids taking advantage dimension to organizational commitment. Hypothesis 7

predicted that the avoids taking advantage dimension of trust is positively correlated with the

total amount of organizational commitment in high technology organizations. From the

correlations table, it can be seen that two variables were not positively correlated $r(29) = .22, p =$

0.23. We can conclude that this hypothesis is rejected and the null hypothesis for hypothesis 7 is

accepted.

Non-hypothesized Significant Correlations

Although not one of the initial hypotheses, the analysis revealed that some of the dimensions of trust were positively correlated with some of the three dimensions of organizational commitment. From Table 14, it can be seen that the keeps commitments dimension of trust was positively correlated with affective commitment where $r(29) = 0.55$, $p =.001$. An inspection of the scatter plot shown as Figure 23 reveals that the relationship is linear.
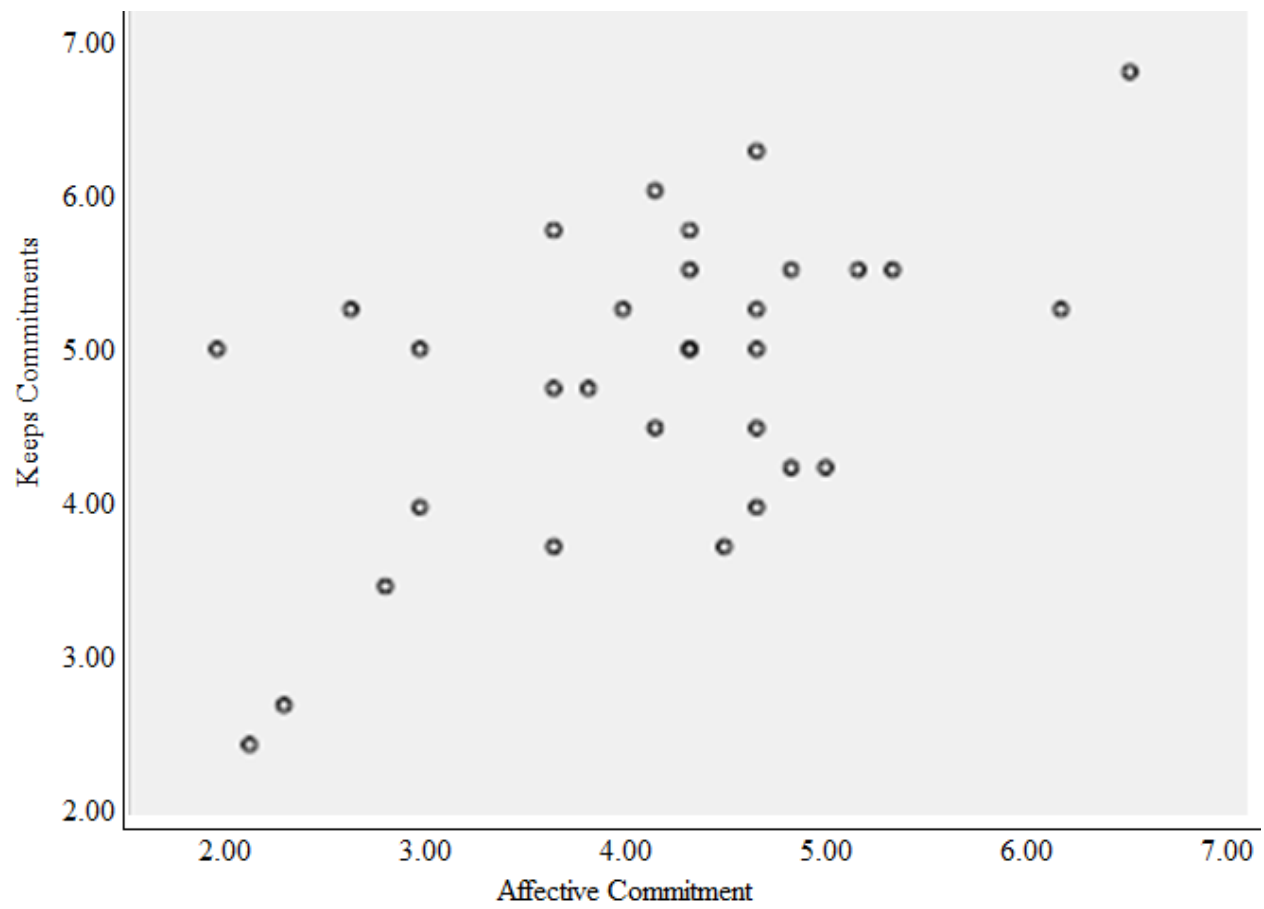

Figure 23. KC to AC scatter diagram

Additionally, from Table 14, it can be seen that the keeps commitments dimension of trust is positively correlated with the dimension of normative commitment where $r(29) = 0.49$, $p =.006$. We can conclude that the keeps commitments dimension of trust was shown to be

positively correlated with normative commitment. An inspection of the scatter plot shown as

Figure 24 reveals that the relationship is linear.

Figure 24. KC to NC scatter diagram.

The keeps commitments dimension of trust was shown to be positively correlated with

continuance commitment. From the correlations table, it can be seen that two variables were

positively correlated $r(29) = 0.49$, $p = .01$. We can conclude that the keeps commitments

dimension of trust was shown to be positively correlated with normative commitment. An

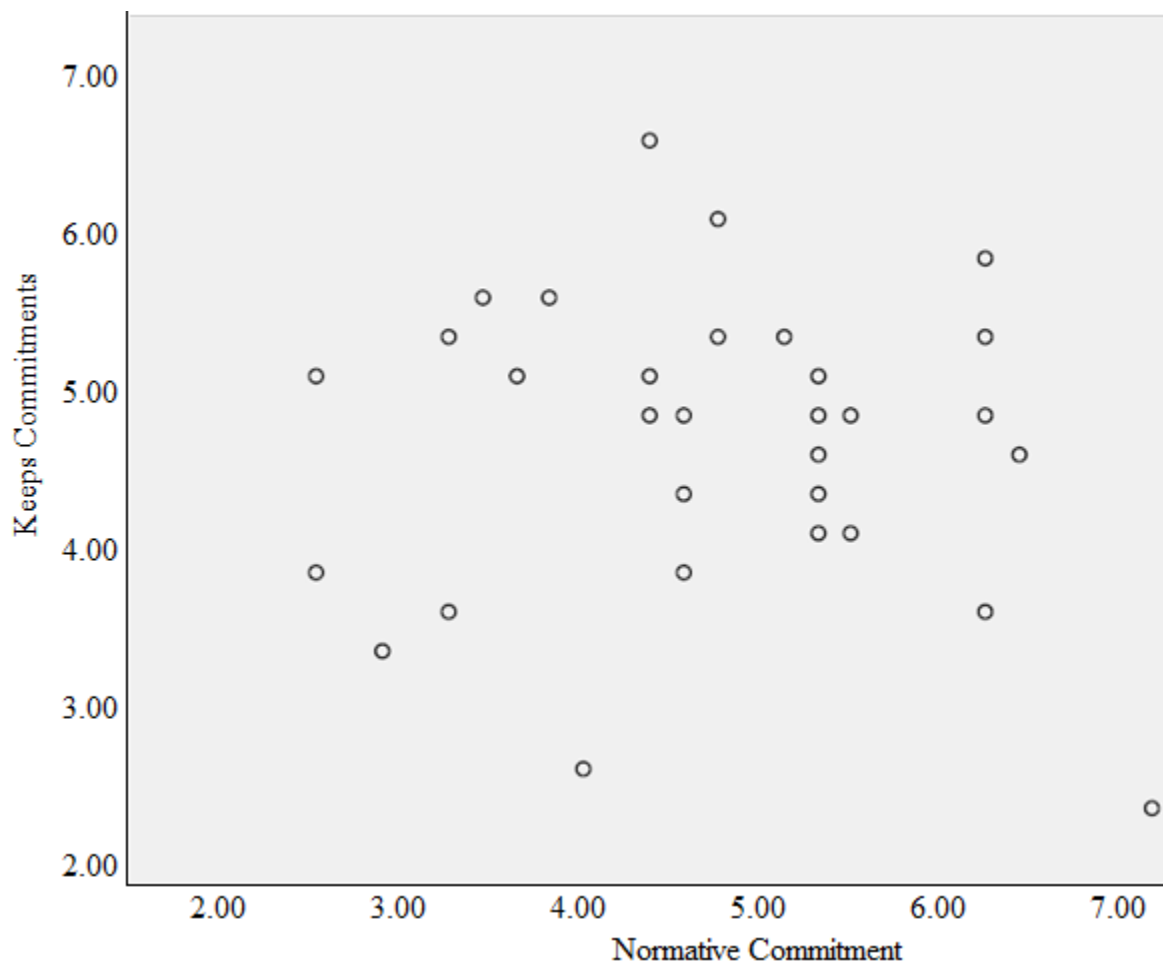inspection of the scatter plot shown as Figure 25 reveals that the relationship is linear.
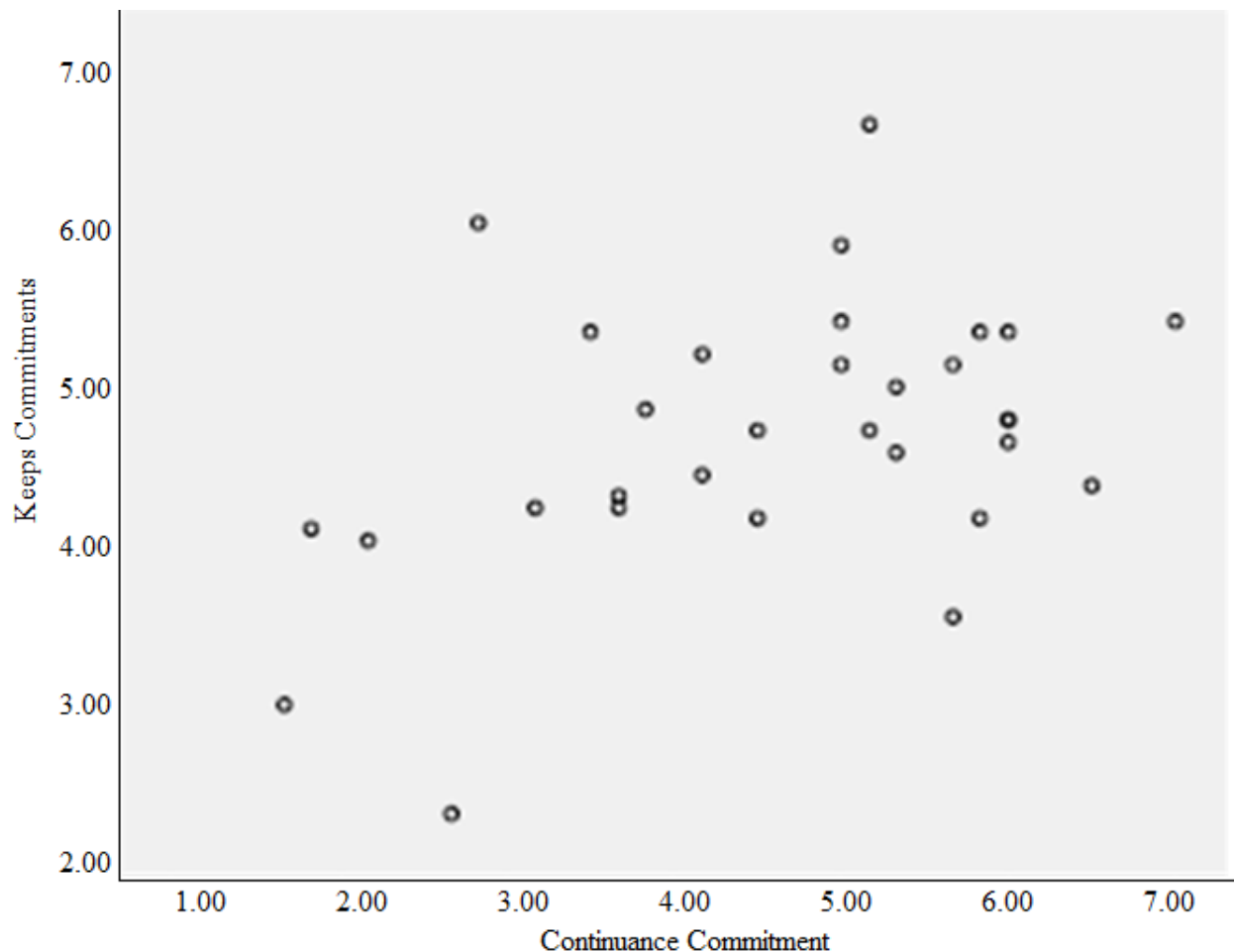

Figure 25. KC to CC scatter diagram.

The negotiates honestly dimension of trust was shown to be positively correlated with affective commitment. From the correlations table, it can be seen that two variables were positively correlated $r(29) = 0.43$, $p = .02$. We can conclude that the negotiates honestly dimension of trust was shown to be positively correlated with affective commitment. An inspection of the scatter plot shown as Figure 26 reveals that the relationship is linear.

Figure 26. NH to AC scatter diagram.

The negotiates honestly dimension of trust was shown to be positively correlated with continuance commitment. From the correlations table, it can be seen that two variables were positively correlated $r(29) = 0.44$, $p = .01$. We can conclude that the negotiates honestly dimension of trust was shown to be positively correlated with continuance commitment. An inspection of the scatter plot shown as Figure 27 reveals that the relationship is linear.

Figure 27. NH to CC scatter diagram.

The avoids taking advantage dimension of trust was shown to be positively correlated with affective commitment. From Table 14, it can be seen that two variables were positively correlated $r(29) = 0.58$, $p = .001$. We can conclude that the negotiates honestly dimension of trust was shown to be positively correlated with affective commitment. An inspection of the scatter plot shown as Figure 28 reveals that the relationship is linear.
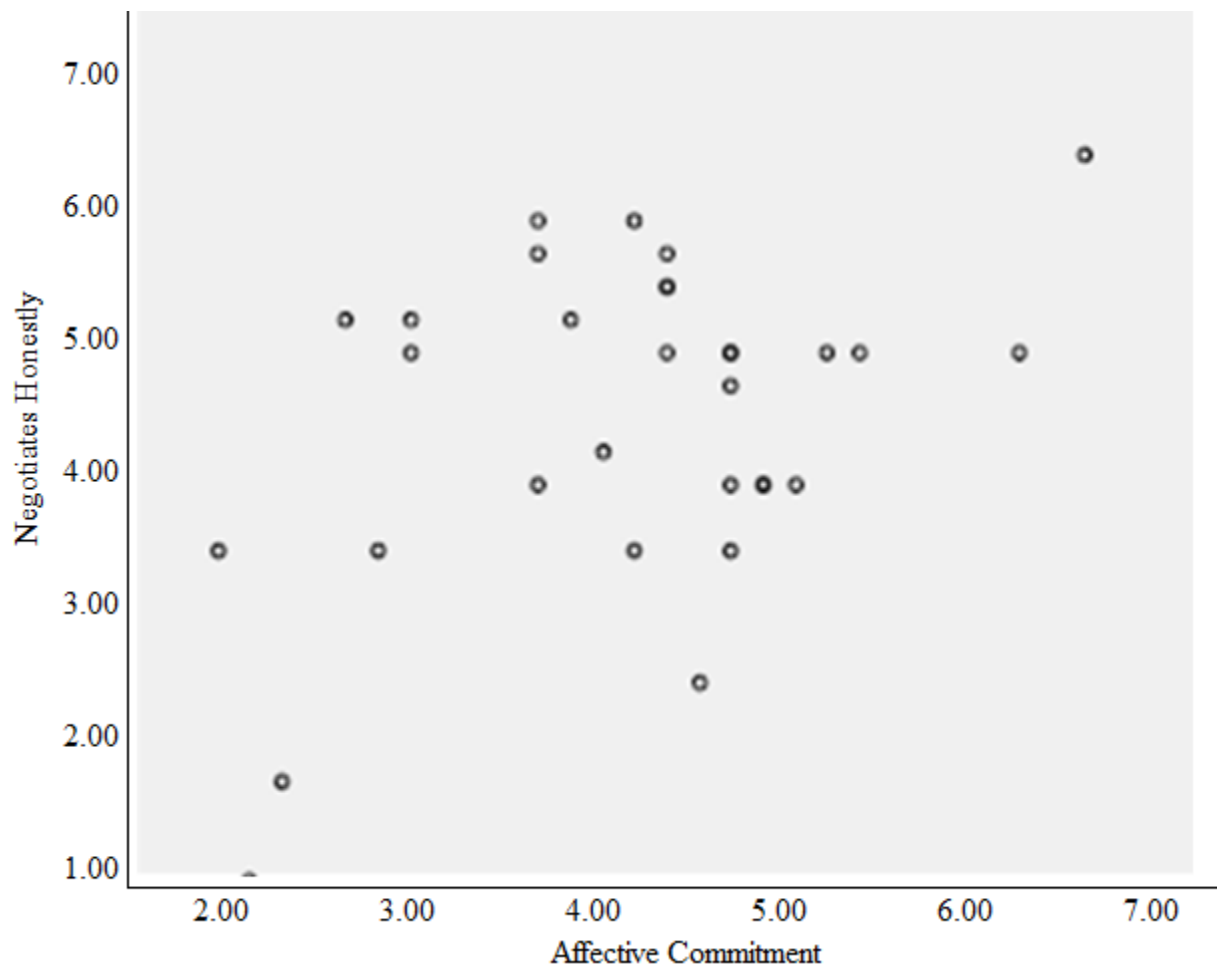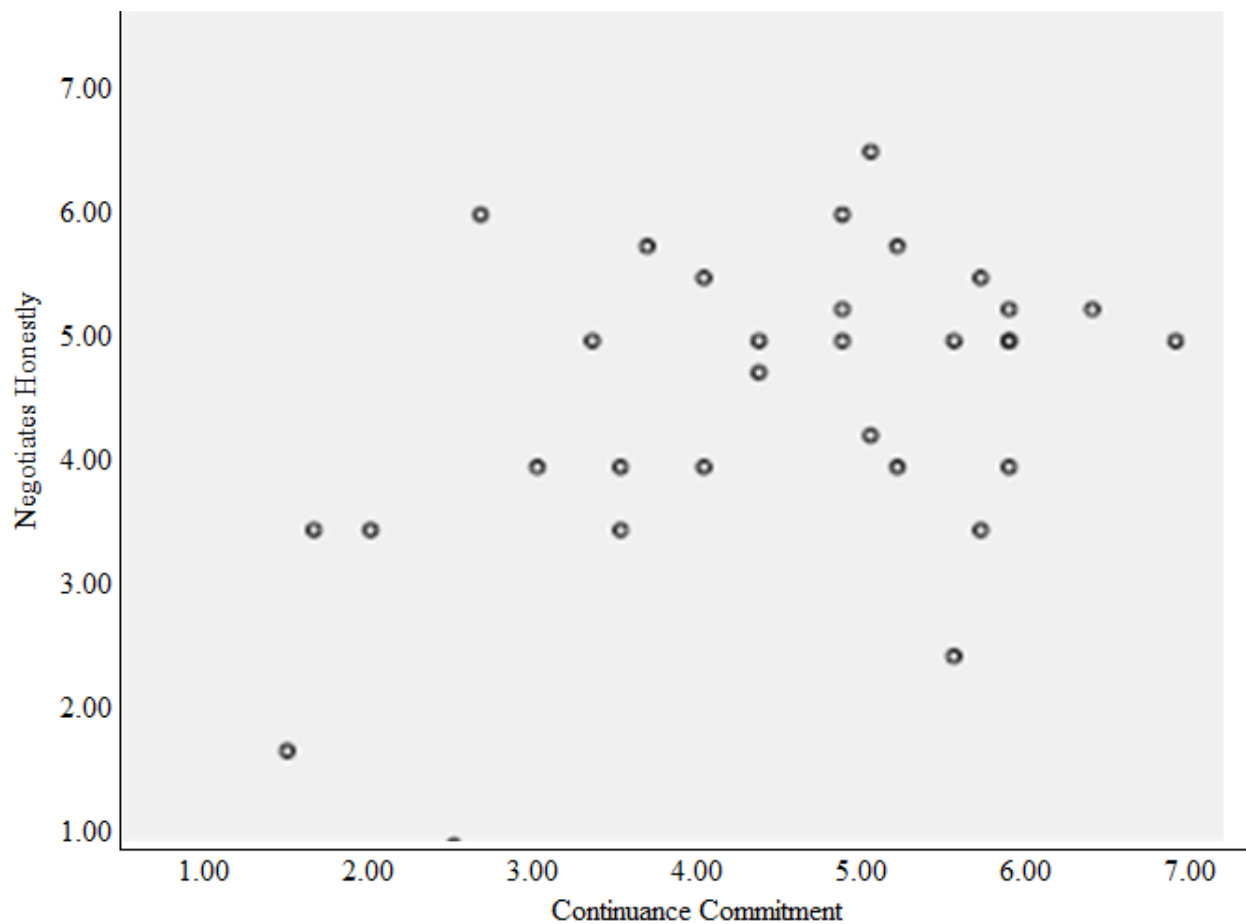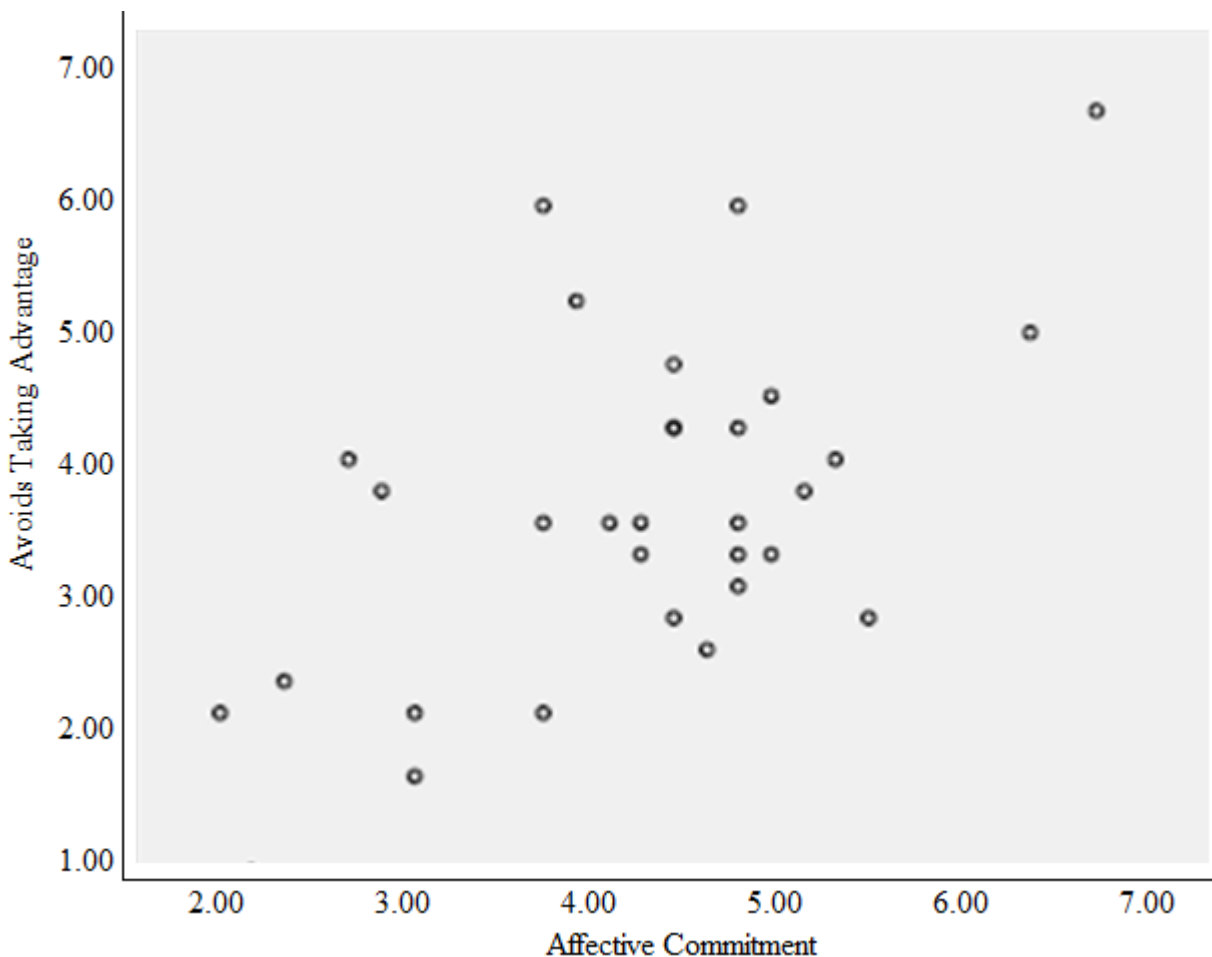
Figure 28. ATA to AC scatter diagram.

Summary

Chapter IV described the results of the study. It included a summary of the population and the participant demographics. The chapter described the method that was used to analyze and evaluate the survey data to explain how the researcher's proposed hypotheses of the relationships between employee trust and organizational commitment were valid. It provided an explanation of the statistical analyses that were used to describe the survey results and included the statistical correlations and scatter diagrams for each of the hypothesized relationships. In summary, as represented in Table 15, five of the seven hypotheses were supported by the study and two were found to have no statistical significance.

Table 15

Correlations of Hypotheses

Hypotheses with positive correlations and significance	Pearson correlation	*p*
H1: Total organizational commitment with the total amount of trust.	0.38	0.03
H2: Affective commitment with the total amount of trust.	0.59	0.01
H3: Total organizational commitment with the *Keeps Commitments* dimension of trust.	0.45	0.01
H5: Total organizational commitment with the *Negotiates Honestly* dimension of trust.	0.37	0.04
H6: Continuance commitment is positively correlated with the total amount of trust.	0.41	0.02

Hypotheses without positive correlations and significance	Pearson correlation	*p*
H4: Normative commitment with the total amount of trust.	-0.16	0.38
H7: Total organizational commitment with the *Avoids Taking Advantage* dimension of trust.	0.22	0.23

In addition to the hypothesized relationships, the analysis revealed several five positive correlations that were not hypothesized. Table 16 shows the five non-hypothesized relationships.

Table 16

Non-hypothesized Correlations

Non-hypothesized correlations and significance	Pearson correlation	*p*
Keeps commitments dimension of trust with affective commitment.	0.55	0.01
Keeps commitments dimension of trust with normative commitment.	0.49	0.01
Keeps commitments dimension of trust with continuance commitment.	0.49	0.01
Negotiates honestly dimension of trust with affective commitment.	0.43	0.02
Negotiates honestly dimension of trust with continuance commitment.	0.44	0.01
Avoids taking advantage dimension of trust with affective commitment.	0.58	0.01

Chapter V: Conclusions and Recommendations

Chapter V compares what was published in the literature to the findings in this study. In this chapter the researcher draws conclusions, posits implications, and provides a series of recommendations for future research. The chapter concludes with an overview of the dissertation, the limitations of the study, and the importance of cultivating trust in leadership to create improved organizational performance.

Cummings and Bromiley (1996) proposed that trust could be assessed on three dimensions of affective, cognitive, and intentional behavior. They conceptualized the Organizational Trust Inventory (OTI) which measured the three dimensions of trust: (a) belief that the individual or group makes good faith efforts to behave in accordance with explicit and implicit commitments, (b) belief that individuals and groups will be honest in negotiations, and (c) belief that the individuals or groups will not take advantage of one another. Additionally, Allen and Meyer (1990) identified three distinct, underlying themes to organizational commitment: (a) an employee's affective attachment to the organization (affective commitment), (b) his or her commitment as a perceived cost associated with leaving the organization (continuance commitment), and (c) the employee's commitment as an obligation to remain with the organization (normative commitment). They developed the Three Component Model (TCM) which is a validated instrument that measures the three dimensions of organizational commitment. Furthermore, they argued that one can achieve a fuller understanding of an employee's relationship with an organization when all three forms of commitment are considered together.

The purpose of this quantitative correlational study was to identify the extent of the relationship between an employee's trust in his or her leader and the amount of his or her

organizational commitment to the organization. The researcher further wanted to understand the impact trust had on each of the three dimensions of organizational commitment as defined by Allen and Meyer (1990).

Hypothesized Relationships Between Trust and Organizational Commitment

There are many studies that have shown that trustworthy behaviors have a positive influence on organizational citizenship behavior (Dirks & Ferrin, 2002; Meyer & Allen, 1997; Organ, 1997; Organ & Ryan, 1995; Podsakoff, et al., 2009; Smith, Organ et al., 1983). The studies had shown that the antecedents to trust are significantly related to outcomes associated with organizational commitment, but they did not study the relationship of overall trust with overall organizational commitment or the three dimensions of organizational commitment as defined by Allen and Meyer (1990).

Trust relationship to organizational commitment. As proposed by hypothesis one, the study showed that trust has a positive effect on organizational commitment. Additionally, the study revealed a positive correlation between trust and the dimensions of both affective and continuance commitment, but it did not show a significant correlation between trust and normative commitment.

Although there are numerous studies that examine the effect of both organizational commitment and trust on specific outcomes, such as turnover, innovation, information sharing, and organizational commitment, the researcher was unable to find any studies on the effects of trust on the three dimensions of organizational commitment. The current study agrees with the published literature by concluding that there is a significant positive correlation between employee trust and organizational commitment. Additionally, the study adds to the existing

body of research by comparing the three dimensions of employee trust (Cummings & Bromiley, 1996) with the three dimensions of organizational commitment (Allen and Meyer, 1991).

Trust and affective commitment. As proposed by hypothesis two, the study showed that trust was positively correlated to the affective commitment. This is consistent with the findings of Gellatly and Withey (2012) who studied the relationship between trust and affective commitment in an effort to determine if the levels of bureaucratic control had an effect on affective commitment. Their findings agreed with this study by proving that higher levels of trust correlated with higher levels of affective commitment in both low and high bureaucratic structures.

Organizational commitment and keeps commitments. As proposed by hypothesis three, the study showed that the keeps commitments dimension of trust is significantly correlated with organizational commitment. In fact, the study showed that trust was significantly correlated with all three dimensions of organizational commitment. The implication of this relationship is that when leaders are dependable and can be relied upon to keep their commitments, it will have a broad effect on the commitment of their employees to the organization. This is consistent with the principles described by Covey and Merrill (2006) who state that leaders must say what they are going to do, then do what they say they are going to do. They need to be careful to make commitments carefully and keep them at all costs. When commitments are not kept, it is important to acknowledge this as soon as possible and never make excuses or break confidences to get out of commitments they have broken.

Trust and normative commitment. Contrary to the relationship as proposed by hypothesis four, the study found that normative commitment was not significantly related to organizational trust. Normative commitment reflects a feeling of obligation to continue

employment. Employees are committed to an organization because they feel they ought to remain with it. The commitment develops through socialization experiences. These experiences emphasize that remaining loyal to the organization is the right thing to do. The lack of significance with this dimension is not a surprise. It was concluded by Meyer et al. (2002) that "more work is needed to understand what normative commitment is, how it develops, and whether it contributes uniquely to the prediction of behavior" (Meyer, 2006, p. 41). The lack of support for this hypothesized relationship may be due to the economic environment, the relatively small sample size of the population, or the organizations that were chosen for the study. Regardless of the reason, it indicates that leaders may not be strengthening the commitment of employee's to feel obligated to reciprocate or pay back the organization through continued employment as much as they may believe when investing in skills training and educational reimbursement programs.

Organizational commitment and negotiates honestly. As proposed by hypothesis five, the study showed that the negotiates honestly dimension of organizational trust was significantly related to the affective and continuance commitment dimensions of organizational commitment. The dimension of normative commitment was not significantly related in its own respect. This would indicate that negotiating honestly does not contribute to forming an individual's feeling of obligation or moral belief to remain with the organization. This lack of correlation may be explained by the demographics of the population. The research did not try to differentiate between the ages of the employees, so a correlation cannot be made, but given that the instruments used in this research were developed using the participants that were part of the *baby boomer* generation, it is plausible there are generational differences between expectations of the younger workforce entering organizations, generally referred to as *millennials*, and those of the

population used in previous studies. The baby boomer generation is generally believed to value experience, recognize hierarchy, and believe in paying your dues. Money and benefits are considered the reward for hard work, long hours, and commitment. Millennials entering the organizations are less-likely to provide blind loyalty and may not have the same feelings of obligation to be loyal to a company. As long as the millennials' personal interests and career needs are being met and the company is socially responsible, they are generally expected to be loyal.

Trust and continuance commitment. As proposed by hypothesis six, the study showed a positive correlation between trust and continuance commitment. Continuance commitment refers to a rational aspect of commitment and concerns the needs of employees. The theory suggests that the longer that an employee remains with the organization, he or she will accumulate investments that will be more costly to lose the longer the employee remains. Unlike affective commitment, it is a calculative or cognitive commitment based on a consideration of the costs and benefits associated with organizational membership, which is unrelated to affect. With the mean tenure of the employees in the population at almost eleven years, the relatively high seniority of the workforce may have influenced the correlation in this study.

Organizational commitment and avoids taking advantage. Although hypothesis seven, the avoids taking advantage dimension of organizational trust, was not significantly related to the overall level of organizational commitment, it was significantly related to the affective commitment dimension of organizational commitment. This indicates that the belief that leaders may take advantage of their employees is not as significant as the other two dimension of trust in regards to total commitment. The normative commitment score is the dimension that reduced the probability that made this an insignificant positive correlation. This

lack of feeling of an obligation may be influenced by the generational differences of the population in the workforce now than what it was when the instruments were validated. Or it may signify that employees may believe that this type of behavior is either expected of leaders or this is not enough of a betrayal of trust to significantly affect their commitment level.

Conclusions and Implications

High-technology organizations are "engaged in the design, development, and introduction of new products and/or innovative manufacturing processes through the systemic application of scientific and technical knowledge" (Hecker, 2005, p. 57). Typically, these firms use state of the art techniques, devote a high proportion of expenditures to research and development, and employ a high proportion of scientific, technical, and engineering personnel. The critical nature of their knowledge and experience makes individuals an important asset that is important to retain within the organization.

To overcome the effects of increased globalization and world competition, high-technology organizations must be able to adjust to the environmental obstacles in order to maintain a competitive advantage or remain viable. With many organizations becoming leaner in an effort to remain competitive, the workers who remain are given increased responsibility, trained to higher levels, and are therefore more difficult to replace. The research was limited to high technology organization, where the importance of trust and the creating the positive benefits of a trusting environment are believed to be critical to the performance and success of high-technology organizations.

This study provided an overview of the overall importance of trust. The study quantified the importance of the different dimensions of trust and how they were significantly correlated with each of the dimensions of organizational commitment. It provided an overview of the

dimensions of trust and their effects on organizational commitment in an effort to quantify the effects of trust. Understanding the antecedents to trust is necessary for leaders to create organizations with the trustworthy behaviors that are necessary for effective organizational performance. This research is expected to provide the researcher with a better understanding of the relationship of trust to organizational commitment. Trustworthy behavior occurs when the foundational antecedents of culture and leadership in the working environment reach a point where employees believe that they can trust their leaders and the organization. The study added to the body of knowledge on the relationship of trust and organizational commitment. It showed that trust is significantly related to organizational commitment. Trust is the result of the combination of both cognitive and affective components. Without an understanding of the antecedents that create and foster trust, leaders will fail to achieve optimal and sustainable performance from their employees.

Limitations

This study was limited in scope and studied only a small sample size of employees that worked for three high technology organizations. The sample size and number of research questions was kept to a minimum so that organization leaders would be more receptive to allowing the researcher to conduct the survey of their organization.

The researcher was primarily interested in the effects of trust in high-technology organizations, so the study was designed with that environment in mind. The scope of the study could be expanded to include non-technical organizations as well. Additionally, there were no data collected on the levels of management in the study. It is possible that the degree of trust in middle management is different than that of upper management. Likewise, trust may be more or less important in one's direct supervisor than it is in higher level managers.

Researcher's Observations

Although the effect of the demographics was not part of the planned study due to the small sample size, the researcher observed some interesting things about some of the characteristics of the participants in the population that may be important to describe. It is likely that differences in gender will lead to different degrees of willingness to trust leadership, but with the ratio of 42% males to 58% females, this difference was not speculated upon by the researcher. The difference in position does deserve some discussion. The ratio of assemblers to support staff is interesting. With less than one-third of the population classifying themselves as support staff, it can be concluded that most of the data were influenced by the assemblers and technicians. In general, the support staff of high-technology organizations is composed of college graduates, usually with a technical degree. Likewise, most of the assemblers and technicians do not hold a college degree. Some interesting aspects to consider would be: With degreed support staff being critical to the success of high-technology organizations, are they given preferential treatment that would alter their perception of leadership? Are less technical and less educated employees less trusting of leadership? Are the more senior employees composed of the support staff because they are treated better and are more difficult to train and replace? Although the degree of the importance of trust to organizational commitment may be different between populations with different demographics, education, or position, it is believed by the researcher that the conclusion that trust is an important antecedent to organizational commitment will be validated by each of these demographic groups.

The mean age of the participants was 51.5 years. From this data it can be deduced that the population was highly populated with baby boomer generation. An analysis of the data shows that about 50% of the participants in the population had less than five years of seniority in

the current organization and 16 % of the population had greater than 30 years of seniority. It can

be speculated that by combining the data of age and seniority that the participants have recent

experience in working at other organizations prior to working for the current organization. This

experience gives them a perspective to compare the existing organization against.

Methodological Enhancements

The limitations to the current study could be minimized if more time was allotted to

increasing the number of organizations and participants. The research did not determine if age,

tenure, or gender had an effect on the relationship between trust and organizational commitment.

The demographics were collected, but not used in the study because the relatively small sample

size of the population. Having a larger population would have enabled a comparison of

differences in gender, seniority, age, and position in the organization. Additionally, a higher

sample size might have detected a significant positive correlation among the hypotheses that the

smaller sample did not have sufficient statistical power to detect. In summary, the relationship

between the demographics should be explored in greater detail.

Additionally, a fuller understanding of the nature of the relationship between trust and

organizational commitment could be achieved if the scope of the study was increased by adding

a qualitative piece to the study. The researcher could add interviews of all of the stakeholders to

achieve a better understanding of why the employees believe that trust is important. If more time

was allotted for the study, the research could follow up with another survey and add interviews

after training, culture improvements, and other trust-inducing improvements were made to the

organizations to better understand if the enhancements are having the anticipated effects of

creating a more trusting workforce.

Organization recommendations. A system model of organizational trust is used to show the antecedents to trust, to explain the affective state that needs to be attained to stimulate trustworthy behaviors, and explain the effects of trustworthy behaviors on organizational performance. The organization is the structure and environment that enables trust to occur. Strengthening the organization's structure, decision making, integrity, and organizational justice will enable a more trustworthy environment and increase levels of trust.

Leadership recommendations. Leadership behavior is critical to achieving the trust of employees. The foundation of effective leadership is when leaders are perceived as having a high degree of trust and are believed to practice ethical behavior. The formation of trust was explained, as well as how trust can be strengthened or lost through leadership behaviors. Leadership style plays a large part on developing and increasing the amount of thrust an employee has in their leader. Covey and Merrill (2006) in *The Speed of Trust* provide an overview of what leaders can do to increase the trust in their organization. Essentially, leaders must say what you they are going to do, then do what they say they are going to do. They need to be careful to make commitments carefully and keep them at all costs. If commitments cannot be kept, it is important to acknowledge this as soon as possible and never make excuses or break confidences to get out of a commitments they have broken.

Recommendations for Future Research

The literature suggested that higher levels of trust in leadership would be positively related to increases in organizational commitment. This study reaffirmed the previous research and also added to the research by providing data on the underlying dimensions of trust and organizational commitment. Given what the literature states, what we have reaffirmed with this

study and what was not included as part of the study, there are several recommendations that can be made for future researchers.

1. The research did not determine if age, tenure, or gender had an effect on the relationship between trust and organizational commitment. The relationship between the demographics should be explored in greater detail. As addressed earlier in the dissertation, the millennials that are joining organizations are believed to have different expectations and beliefs than the baby boomers that are leaving organizations or the Generation Xs that are currently employed. Understanding the antecedents that are most-important to this new workforce can go a long way to cultivating a trusting environment and ultimately improving organizational performance.

2. A better understanding of normative commitment and trust is needed. The study showed a positive correlation of this dimension of organizational commitment only with the Keeping Commitments dimension of trust. The researcher agrees with Meyer et al. (2002) who stated that understanding how normative commitment develops, and whether it contributes uniquely to the prediction of behavior needs to be better understood. The lack of support for this hypothesized relationship may be impacted by the economic environment, attitudes of the workforce, demographics of the population, or other variables.

3. A better understanding between the avoids taking advantage dimension of trust and organizational commitment is needed. The study showed a positive correlation of this dimension of trust with only the affective commitment dimension of organizational commitment, meaning it was not correlated with either normative of continuance commitment.

 Final Summary

A major problem is that in today's economic environment there are many pressures put on leaders that encourage them to act in ways that can cause them to lose the trust of their employees. An employee's trust in his or her leader is the single most important factor in determining the success or failure of any organization (Covey & Merrill, 2006). There is no exact formula for creating trust in an organization. Trust is a complex assortment of behaviors, actions, beliefs, intentions, motivations, expectations, assumptions, emotions, and feelings (Shockley-Zalabak, et al., 2010).

Trust is influenced by organization structure and leadership behaviors, and can be nurtured and grown, but it can also be easily destroyed. Since trust is critical for the success of organizations, leaders need to understand what to do, and what not to do to create a trusting organization. Competitive pressures make it difficult for leaders to be honest and transparent with employees, stockholders, suppliers, and competitors. When leaders understand the relationship between trust and organizational commitment, they can decide how to structure the organization and how to lead in a manner that will enable a more trusting environment.

The study used quantitative correlational methods to determine the effects of an employee's trust in their leader and the amount of organizational commitment they have. It showed how leadership and organizational trust can be assessed on the dimensions of affective, cognitive, and intentional behavior (Cummings & Bromiley, 1996) and how organizational commitment is composed of the dimension of affective commitment, continuance commitment, and normative commitment (Allen & Meyer, 1991). Furthermore, it explains the researcher's hypothesis that the three dimensions of trust may be correlated with the three dimensions of organizational commitment.

This research study provided an overview of the overall importance of trust. It provided an overview of the dimensions of trust and their effects on organizational commitment in an effort to quantify the effects of trust. The study quantified the importance of the different dimensions of trust and showed how they were correlated with each of the dimensions of organizational commitment. The study provided quantitative data that supported the importance of trust to achieve the commitment of employees to the values, objectives, and goals of the organization.

Understanding the antecedents to trust is necessary for leaders to create organizations with the trust enabling behaviors that are necessary for organizational performance. This research provided the researcher with a better understanding of the relationship of trust to organizational commitment. Trustworthy behavior occurs when the foundational antecedents of culture and leadership in the working environment reach a point where employees believe that they can trust their leaders and the organization. Trust is the result of the combination of both cognitive and affective components. Without an understanding of the antecedents that create and foster trust, leaders will fail to achieve optimal and sustainable performance.

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APPENDIX A

Study Information Disclosure Letter

**Consent Form and Survey Questionnaire for Participation in a
Research Study on Employee Trust and Organizational Commitment**

The following information is provided to help you decide whether you wish to participate in a research study. Please take your time to read the information below and feel free to ask any questions before signing this document.

My name is Ron Freund, and I am a doctoral candidate at Pepperdine University. The professor supervising my work is Dr. Leo Mallette. My research study is titled "Determining the Effects of Employee Trust on Organizational Commitment in High-Technology Organizations" and is being conducted as partial requirement for my doctoral degree in Organizational Leadership.

The purpose of this study is to determine the relationship of an employee's trust in leadership to their organizational commitment. If you volunteer to participate in this study, you will be asked to provide basic demographic data and then respond to thirty survey questions. There is no right or wrong answer to the questions. The questions solicit your opinions and beliefs on issues related to trust and organizational commitment.

Care has been taken to remove as many potential risks to those who participate as possible; however there is a minor risk of inconvenience to the you, as well as boredom and fatigue associated with surveys. To reduce this risk, the survey has been limited to thirty questions and is expected to take about ten minutes to complete. If you do not want to take this survey now, or if at any time you feel discomfort, you may stop and complete the survey at a later time. If you desire, you can take the survey home with you and mail the completed survey to my home address. I have stamped self-addressed envelopes available if you choose to complete the survey at a later time. All completed surveys must be received by the researcher within two weeks of today's date to be included in the study. If you choose not to participate or to withdraw from the study at any time, you can do so without penalty or loss of benefit to yourself. You will not be photographed or recorded at any time. You will not be compensated for your participation or directly benefit from participating in this research study. Additionally, you will not be penalized in any way for declining to participate in this study. You must be eighteen years of age and have worked for the organization for at least one month to participate in the study.

The results of the study may be published, but your name and the name of your organization will not be shared or published and will remain confidential. The summarized survey data will be shared with the developers of the survey instruments via email after all personally and organizationally identifiable information has been removed. Upon completion of the analysis of the data, the informed consent form and raw survey data will be stored in a safe deposit box for three (3) years. At the end of three years, this informed consent form and the survey data will be permanently destroyed. If you have any questions, please feel free to ask me now.

If you have further questions regarding this research, you may contact me, the primary investigator, Ron Freund at: ron.freund@pepperdine.edu, 562-235-4897 or my faculty supervisor, Dr Leo Mallette at: LeoKathy96@aol.com. If you have questions about your rights as a research participant, you may contact Dr. Doug Leigh, Chairperson of the GPS IRB at Pepperdine University at gpsirb@pepperdine.edu or 310-568-2389.

GPS IRB APPROVAL
PEPPERDINE UNIVERSITY

August 28, 2014

**VALID UNTIL
DATE ABOVE**

APPENDIX B

Consent to Participate in Research

I understand that this research study has been reviewed by Graduate and Professional Schools (GPS) Institutional Review Board, Pepperdine University. For research-related problems or questions regarding participants' rights, I may contact Dr. Doug Leigh, Chairperson of the GPS IRB at Pepperdine University at gpsirb@pepperdine.edu, 310-568-2389.

I have read and understand the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study. I have been given a copy of this consent form.

By signing this document, I consent to participate in this study.

_____
Research Participant's Full Name (Print)

_____   _____
Research Participant's Signature   **Date**

I have explained and defined in detail the research procedure in which the subject has consented to participate. Having explained this and answered any questions, I am cosigning this form and accepting this person's consent.

Ron Freund   Principal Investigator

_____   _____
Principal Investigator Signature   **Date**

APPENDIX C

Organizational Trust-Commitment Survey

1. Please choose A, B or C (from list below) that best describes your current position: _____
 (A) Technician or Assembler   (B) Engineer or Support   (C) Supervisor/Manager

2. Please choose how you identify yourself (please circle):   Male   Female

3. What was your age at your last birthday? _____

4. Have you worked for this organization for more than one month? (please circle): Yes   No

5. How many years have you worked for this organization? _____

Please indicate by choosing in the number to the right of each ststement that most closely
describes your opinion at this time. You should intrepret the term "management" to be your
immediate supervisor, manager, or leader. Please remember that your responses are strictly
confidential and you are requested to be as honest as possible.

Strongly Disagree 1	Disagree 2	Slightly Disagree 3	Neither Agree or Disagree 4	Slightly Agree 5	Agree 6	Strongly Agree 7

6. I think the people in management tell the truth in negotiations.	1 2 3 4 5 6 7
7. We think that management meets its negotiated obligations	1 2 3 4 5 6 7
8. In our opinion, management is reliable.	1 2 3 4 5 6 7
9. We think that the people in management succeed by stepping on other people.	1 2 3 4 5 6 7
10. We feel that management tries to get the upper hand.	1 2 3 4 5 6 7
11. We think that management takes advantage of our problems.	1 2 3 4 5 6 7
12. We feel that management negotiates with us honesty.	1 2 3 4 5 6 7
13. We feel that management will keep its word.	1 2 3 4 5 6 7
14. We think management does not mislead us.	1 2 3 4 5 6 7
15. We feel that management tries to get out of its commitments.	1 2 3 4 5 6 7
16. We feel that management negotiates joint expectations fairly.	1 2 3 4 5 6 7
17. We feel that management takes advantage of people who are vulnerable.	1 2 3 4 5 6 7
18. I would be very happy to spend the rest of my career with this organization.	1 2 3 4 5 6 7
19. I really feel as if this organization's problems are my own.	1 2 3 4 5 6 7
20. I do not feel a strong sense of "belonging" to my organization.	1 2 3 4 5 6 7
21. I do not feel "emotionally attached" to this organization.	1 2 3 4 5 6 7
22. I do not feel like "part of the family" at my organization.	1 2 3 4 5 6 7
23. This organization has a great deal of personal meaning for me.	1 2 3 4 5 6 7
24. Right now, staying with my organization is a matter of necessity as much as desire.	1 2 3 4 5 6 7
25. It would be very hard for me to leave my organization right now, even if I wanted to.	1 2 3 4 5 6 7
26. Too much of my life would be disrupted if I decided I wanted to leave my organization now.	1 2 3 4 5 6 7
27. I feel that I have too few options to consider leaving this organization.	
28. If I had not already put so much of myself into this organization, I might consider working elsewhere.	1 2 3 4 5 6 7 1 2 3 4 5 6 7
29. One of the few negative consequences of leaving this organization would be the scarcity of available alternatives.	1 2 3 4 5 6 7
30. I do not feel any obligation to remain with my current employer.	1 2 3 4 5 6 7
31. Even if it were to my advantage, I do not feel it would be right to leave my organization now.	1 2 3 4 5 6 7
32. I would feel guilty if I left my organization now.	1 2 3 4 5 6 7
33. This organization deserves my loyalty.	1 2 3 4 5 6 7
34. I would not leave my organization right now because I have a sense of obligation to the people in it.	1 2 3 4 5 6 7
35. I owe a great deal to my organization.	1 2 3 4 5 6 7

APPENDIX D

Permission to Use OTI Instrument

Freund, Ron

From:	Philip Bromiley [bromiley@uci.edu]
Sent:	Monday, April 22, 2013 10:37 AM
To:	Ron Freund student
Subject:	RE: Permission request to use OTI

Sure, you can use it subject to the following conditions: (i) it is used strictly for research [we charge a small fee for commercial use], (ii) you appropriately cite it in any presentations or documents, and (iii) when you're done, you send me a copy of the instrument and data. We're interested in the data to develop norms for the instrument.

Phil

Philip Bromiley
Dean's Professor in Strategic Management Merage School of Business University of California, Irvine Irvine, CA 92697-3125
Phone: (949) 824-6657
Fax: (949) 725-2898
Email: Bromiley@uci.edu

"The subject who is truly loyal to the Chief Magistrate will neither advise nor submit to arbitrary measures."   Junius

-----Original Message-----
From: Ron Freund student [mailto:rfreund@pepperdine.edu]
Sent: Sunday, April 21, 2013 5:48 PM
To: Philip Bromiley
Cc: ron.freund@boeing.com
Subject: Permission request to use OTI

Dear Dr. Bromiley,
My name is Ron Freund. I am a student in the EdOL program at Pepperdine University, in West Los Angeles, CA. I am currently writing my doctoral dissertation on the effect of trust on organizational commitment. I am requesting your permission to use the Organizational Trust Inventory - short form, as an instrument in my research study. I intend to complete my research study before October, 2013. Please contact me at the address below with your response. Thank you.

Sincerely,
Ron Freund
Email: ron.freund@pepperdine.edu
Mail: Ron Freund

APPENDIX E

IRB Approval Letter

PEPPERDINE UNIVERSITY

Graduate & Professional Schools Institutional Review Board

August 29, 2013

Ron Freund

█████████████

Protocol #: E0713D03
Project Title: Determining The Effects of Employee Trust On Organizational Commitment In High-Technology Organizations

Dear Mr. Freund,

Thank you for submitting your application, Determining The Effects of Employee Trust On Organizational Commitment In High-Technology Organizations, for expedited review to Pepperdine University's Graduate and Professional Schools Institutional Review Board (GPS IRB). The IRB appreciates the work you and your advisor, Dr. Leo Mallette, completed on the proposal. The IRB has reviewed your submitted IRB application and all ancillary materials and determined that the above entitled project **meets the requirements for expedited review** under provision Title 45 CFR 46.110 (Research Category 7) of the federal Protection of Human Subjects Act.

I am pleased to inform you that the IRB application for your study was granted **Approval.** The IRB approval begins today, **August 29, 2013,** and terminates on **August 28, 2014**.

Your final consent form has been stamped by the IRB to indicate the expiration date of study approval. One copy of the consent form is enclosed with this letter and one copy will be retained for our records. **You can only use copies of the consent that have been stamped with the GPS IRB expiration date to obtain consent from your participants.**

Please note that your research must be conducted according to the proposal that was submitted to the GPS IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For *any* proposed changes in your research protocol, please submit a Request for Modification form to the GPS IRB. Please be aware that changes to your protocol may prevent the research from qualifying for expedited review and require submission of a new IRB application or other materials to the GPS IRB. If contact with subjects will extend beyond **August 28, 2014**, a **Continuation or Completion of Review Form** must be submitted at least one month prior to the expiration date of study approval to avoid a lapse in approval.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the GPS IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the GPS IRB and the appropriate form to

be used to report this information can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* (see link to "policy material" at http://www.pepperdine.edu/irb/graduate/).

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval. Should you have additional questions, please contact me. On behalf of the GPS IRB, I wish you success in this scholarly pursuit.

Sincerely,

Doug Leigh, Ph.D.
Chair, Graduate and Professional Schools IRB
Pepperdine University

cc: Dr. Lee Kats, Vice Provost for Research and Strategic Initiatives
        Ms. Alexandra Roosa, Director Research and Sponsored Programs
        Dr. Leo Mallette, Graduate School of Education and Psychology

APPENDIX F

TCM Organizational Commitment Survey License

QUESTIONNAIRE LICENSE AGREEMENT – FOR ACADEMIC RESEARCHER / STUDENT USE

IMPORTANT: The Questionnaire you seek to use is licensed only on the condition that you ("YOU") are an Academic Researcher (as defined below) and agree with The University of Western Ontario ("UWO") to the terms and conditions set forth below. THIS LICENSE IS LIMITED TO A SINGLE USE OF THE QUESTIONNAIRE IN A RESEARCH PROJECT. ADDITIONAL USES OF THE QUESTIONNAIRE REQUIRE A RENEWAL LICENSE. PLEASE CAREFULLY READ THE TERMS AND CONDITIONS OF THIS QUESTIONNAIRE LICENSE AGREEMENT.

IF YOU AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT, YOU SHOULD CLICK ON THE "I Accept" BOX AT THE BOTTOM OF THIS AGREEMENT. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, YOU ARE NOT AUTHORIZED TO DOWNLOAD OR USE THE QUESTIONNAIRE.

DEFINITIONS

In this agreement, the following words, when capitalized, have the indicated meanings:

"Academic Researcher" indicates someone whose position presumes that they will conduct research and be responsible for the publication or other dissemination of the results of that research or be responsible for the teaching of students.

"Inventors" indicate the authors, Dr. John Meyer and Dr. Natalie Allen, in the faculty of Social Science at UWO.

"Questionnaire" indicates the TCM Employee Commitment Survey, Academic Version 2004 developed by the Inventors. The Questionnaire includes the Users Guide and the Organizational Commitment Survey which is available in two versions; the "Original" which contains 24 questions and the "Revised" which contains 18 questions. The license granted under this Agreement includes both versions of the survey and the Users Guide and can be downloaded from this website as a single PDF file.

"Research Project" indicates the administration of the Questionnaire to a person(s) or an organization by an Academic Researcher for the purpose of a single academic research study whereby no consideration of any kind, payment or otherwise, is received from the participants, or any affiliates of the participants, for the results from administering the Questionnaire.

1. LICENSE TO USE: UWO hereby grants to YOU a personal, non-exclusive, revocable, non-transferable, limited license to use the Questionnaire in a single Research Project. Any use of the Questionnaire for consulting or other commercial purposes is strictly prohibited.

2. LICENSE FEE: For use in a single Research Project conducted by an Academic Researcher the fee shall be $50.00 USD, plus a five per cent administration fee and any applicable taxes.

3. TERMS OF USE:
(a) YOU acknowledge that the Questionnaire is a copyrighted work and that it shall retain any copyright notices contained in or associated with the Questionnaire. Any use of or reference to the Questionnaire in a Research Project shall include the following notice: "Use of the TCM Employee Commitment Survey, authored by John Meyer and Natalie Allen was made under license from the University of Western Ontario, London, Canada".

(b) YOU agree (at the request of the Inventors) to share any results of the research conducted using the Questionnaire.

4. TERM AND TERMINATION: This Agreement is limited to use in a single Research Project and shall terminate at the conclusion of the Research Project. Use of the Questionnaire in subsequent research requires a renewal of the license. This Agreement shall terminate immediately without notice from UWO if you fail to comply with any provision of this Agreement. On any termination of this Agreement, the Disclaimer of Warranty, Restrictions, Limitation of Liability and Indemnity

provisions of this Agreement shall survive such termination.

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• distribute, sell, lease, transfer, assign, trade, rent or publish the Questionnaire or any part thereof and/or copies thereof, to others;
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9. GOVERNMENT END USERS: US Government end users are not authorized to use the Questionnaire under this Agreement.

10. USE OF THE WEBSOFT DOWNLOAD SERVICE: YOU represent and warrant that YOU possess the legal authority to enter into this Agreement, and that YOU shall be financially responsible for your use of the Websoft Download Service. YOU agree to be responsible for any License Fees, costs, charges and taxes arising out of your use of the Questionnaire and the Websoft Download Service. YOU are responsible for supplying any hardware or software necessary to use the Questionnaire pursuant to this Agreement.

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(a) The Websoft Download Service is operated from Vancouver, British Columbia, Canada and this Agreement (and all disputes arising out of or relating to this Agreement) shall be governed and interpreted according to the laws of British Columbia, Canada without regard to its conflicts of laws rules. YOU agree that by accepting the terms of this Agreement and using the Software YOU have attorned to the exclusive jurisdiction of the Court of competent authority in the City of Vancouver, Province of British Columbia, Canada.

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(c) YOU agree that no joint venture, partnership, employment, consulting or agency relationship exists between YOU and UWO as a result of this Agreement or your use of the Websoft Download Service.

(d) This Agreement is the entire agreement between YOU and UWO relating to this subject matter. YOU shall not contest the validity of this Agreement merely because it is in electronic form.

(e) No modification of this Agreement shall be binding, unless in writing and accepted by an authorized representative of each party.

(f) The provisions of this Agreement are severable in that if any provision in the Agreement is determined to be invalid or unenforceable under any controlling body of law that shall not affect the validity or enforceability of the remaining provisions of the Agreement.

(g) All prices are in US dollars and prices are subject to change without notice. UWO shall not be liable for any typographical errors, including errors resulting in improperly quoted prices on the Download Summary screen.

(h) YOU should print out or download a copy of this Agreement and retain it for your records.

(i) YOU consent to the use of the English language in this Agreement.